REPORT RESUMES

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CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION AT THE OHIO STATE UNIVERSITY. FINAL REPORT.
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THE CENTER WAS ESTABLISHED MARCH 1, 1965, TO PERFORM RESEARCH, DEVELOP PILOT PROJECTS, AND ENCOURAGE EXPERIMENTAL ACTIVITIES TO IMPROVE VOCATIONAL AND TECHNICAL EDUCATION. THE ERIC CLEARINGHOUSE FOR VOCATIONAL AND TECHNICAL EDUCATION WAS ESTABLISHED MARCH 1, 1966, AS PART OF THE CENTER. THE OBJECTIVES OF THE CENTER ARE TO (1) CONTINUALLY REAPPRAISE VOCATIONAL AND TECHNICAL EDUCATION'S ROLE, (2) STIMULATE STATE, REGIONAL, AND NATIONAL RESEARCH, (3) ENCOURAGE RESEARCH DEVELOPMENT, (4) CONDUCT RESEARCH, (5) UPGRADE LEADERSHIP, (6) PROVIDE A NATIONAL INFORMATION SYSTEM, AND (7) PROVIDE STUDY OPPORTUNITIES FOR THOSE PLANNING FOREIGN SERVICE. AN INDEPENDENT FEDERALLY SUPPORTED UNIT OF THE OHIO STATE UNIVERSITY, THE CENTER HAS SOUGHT ADDITIONAL FINANCIAL SUPPORT FROM FOUNDATIONS AND OTHER SOURCES TO FURTHER DEVELOP ITS PROGRAM. A 19-MEMBER NATIONAL ADVISORY COMMITTEE FUNCTIONS IN IDENTIFYING PROBLEMS, ESTABLISHING PRIORITIES, IDENTIFYING RESOURCES, DEVELOPING COORDINATION AND COOPERATION WITH OTHER AGENCIES, INSTITUTIONS, AND PROGRAMS, AND EVALUATING THE EFFECTIVENESS OF THE CENTER. THE STAFF IS COMPRISED OF SPECIALISTS IN VOCATIONAL AND TECHNICAL EDUCATION AND SUPPORTING AREAS AND SUSTAINING PERSONNEL. AMONG THE 28 PROJECTS ACCOMPLISHED OR IN PROGRESS ARE CLINICS, SEMINARS, TRAINING SESSIONS, CONFERENCES, INSTITUTES, RESEARCH STUDIES, RESEARCH REVIEWS, AND SURVEYS CONCERNED WITH ADMINISTRATION, PROGRAM DEVELOPMENT, RESEARCH, LEADERSHIP, EVALUATION, INSTRUCTIONAL MATERIALS, INFORMATION RETRIEVAL, DROPOUTS, DISADVANTAGED YOUTH, TEACHERS AND COOPERATIVE EDUCATION IN THE FIELDS OF GUIDANCE, BUSINESS, HOME ECONOMICS, HEALTH OCCUPATIONS, AGRICULTURE, TRADES AND INDUSTRY, DISTRIBUTIVE, AND TECHNICAL EDUCATION. (JM)

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CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION AT THE OHIO STATE UNIVERSITY

May, 1967

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Robert E. Taylor

May, 1967

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The Center for Research and Leadership Development
in Vocational and Technical Education

The Ohio State University
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Columbus, Ohio 43212

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INTRODUCTION

This report concerns the establishment of The Center for Research and Leadership Development in Vocational and Technical Education and its progress during the initial funding period. The original proposal for The Center was submitted on April 20, 1964, and approved and funded for an 18-month period as BR 5-0212 on March 1, 1965. It was amended on March 1, 1966, to establish an ERIC Clearinghouse for Vocational and Technical Education.

Experiences to date have tested the basic rationale of The Center; its goals; its relationships to key institutions, groups, and organizations; and its operational procedures, and found them to be sound, workable, and effective. Further, the profession's enthusiastic support and endorsement of The Center's accomplishments to date and its potential not only validate the wisdom of the initial investment and decision to establish The Center but also emphasize the expanded possibilities in its continuance. Since The Center has been renewed for a five-year period effective October 16, 1966, through October 15, 1971, this report should be viewed as a "progress" report rather than a final report.

The Center has been established with a view to its long-range impact on significant problems in vocational and technical education. The major thrusts of The Center are in research, development, leadership development, and dissemination, utilizing The Center's affiliation with central ERIC. In pursuing these thrusts The Center has maintained effective communication and coordination with appropriate

Divisions of the Office of Education and other relevant groups. A definite strategy of change which provides a firm organizational foundation has been laid, key liaisons established, and essential change mechanisms effected. Assuredly, increased yield and impact will accrue as a result of this seeding effort.

The Center provides a much needed vehicle for catalyzing and energizing relevant resources in focusing on critical problems in vocational and technical education. It is comprehensive in its commitment, multidisciplinary in its approach, and interinstitutional in its program.

The Center Concept-An Accepted Strategy

These pressing problems, threatening to limit the effectiveness of future vocational and technical education, have been recognized:

1. The continued need for adequate identification, stimulation, conduct, and coordination of research;
2. The need for a multidisciplinary, interinstitutional structure for conducting research;
3. The need for rapid exploitation and application of research results, educational technologies, and proven innovations from the United States and other nations to the pressing problems of vocational and technical education;
4. The need for an effective information retrieval, storage, and dissemination system;
5. The need for state vocational education leadership development.

Over a period of time there has been agreement that the center concept is one of the most viable means of coping with the complex problems of developing an adequate and effective research and development effort in vocational and technical education. For example, one of the specific recommendations of the Report of the President's Panel of Consultants on Vocational Education was, that "federal funds be made available to establish and operate selected centers to perform research, develop pilot projects, and encourage experimental activities to improve vocational and technical education."

Recognizing the need for this function on a national level, they further recommended that federal funds should wholly support these services and that the results of these activities should be made available to all states.[1]

The vocational and technical education profession believed that one of the most effective means of developing an adequate research and leadership development program was through a Center for Advanced Study and Research in Vocational and Practical Arts Education. Therefore, the House of Delegates of the American Vocational Association passed a resolution at their 1963 national meeting approving in principle and supporting the establishment of such a national center which would include all areas of vocational and technical education.

The value of an established center has been well accepted by leaders in the profession. For example, following a recent research conference sponsored by The Center, Dr. Melvin Barlow, Director of the Division of Vocational Education of the University of California system, in a letter commenting on the essential role of a center, said, "We need a centralized coordinating force so that the research conducted in other institutions will 'fit' with the need in general."

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[1] Education for a Changing World of Work. OE-80021. Washington, D. C.: U. S. Government Printing Office, 1963, pp. 262-263.

It is heartening, in an area such as vocational education with its many diversities and alternatives, to find profession-wide agreement on the need for continued support of an independent, comprehensive organizational structure which encompasses necessary resources; retains the essential freedom, flexibility, and adaptability to move quickly and aggressively on priority problems; and yet addresses itself to long-range considerations.

Further, during the establishment period Center personnel have maintained close contact with the national professional association and other relevant groups. The Center Director has made three progress reports to the American Vocational Association Board of Directors. Frequent contacts and coordination efforts have been maintained with the Division of Vocational and Technical Education in the U. S. Office of Education, and DVTE personnel have been involved in planning committees on major Center activities and functions. Substantial and enduring relationships and linkages have been established which will improve the effectiveness and efficiencies of future Center activities.

The problems associated with assisting the profession in providing leadership for high-quality vocational education to all age groups in all areas, that is appropriate to both their needs and the requirements of the labor market, are of such breadth, magnitude, and significance that they require an entire university community to provide an appropriate environment for such a center to cope with them. Cooperation from key groups, both on the campus and throughout the nation, has been demonstrated in The Center activities. It has taken time and effort to establish and cultivate these linkages. The yield from these viable relationships will mature and expand.

The Center development has initiated new approaches in organization, administration, staffing, and operational procedures. While some of the procedural innovations suggested may have been or are being used in other individual efforts, the totality of effort has not been attempted elsewhere in vocational education.

Recognizing that current impediments which deny an effective and realistic program of vocational and technical education to all transcend not only the interests and capabilities of individual vocational services but also those of vocational education itself, a carefully conceived procedure for establishing needed consortia has been woven throughout the fabric of the plans and activities of The Center--a confederation of ideas, institutions, agencies, and disciplines.

One of the urgent needs of providing a locus for synthesis and for relating the unique, the isolated, the individual innovative efforts into a more comprehensive relationship has been met by the establishment of The Center. By assembling the essential resources and through the diverse staffing pattern, an information retrieval system, and other related efforts, The Center can provide means of correlating many current efforts.

The Center for Research and Leadership Development in Vocational and Technical Education is designed to fulfill a need for a comprehensive organizational structure which embraces and utilizes the unique capacities and interests of the profession, supporting disciplines, and various institutions and agencies. It is envisioned that this structure will continue to provide the needed vehicle to catalyze essential resources to effect major changes in vocational and technical education.

The primary areas of emphasis in The Center program are research, development, leadership development, and dissemination and demonstration activities, utilizing The Center's linkage with the U. S. Office of Education ERIC system. In fulfilling these commitments, every effort is made to maintain an appropriate balance among these major components. Realignment of priorities, emergent problem areas, and parallel activities of other groups are assessed in determining this balance. It is recognized that national leadership for the major aspects of vocational and technical education program implementation and operation is an Office of Education responsibility.

OBJECTIVES OF THE CENTER

To carry out the broad purpose of providing leadership in the further development and improvement of vocational and technical education, the following seven objectives were stated in the original proposal. Through the experiences of the initial funding period, these objectives have been subjected to intense scrutiny and assessment in terms of their appropriateness and adequacy as a focus for future Center efforts. Judgments confirm their continuance as the objectives of The Center.

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;

3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;
6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Research Information Center located in the U. S. Office of Education;
7. To provide educational opportunities for individuals contemplating foreign assignments and for leaders from other countries responsible for leadership in vocational and technical education.

The multifaceted dimensions of The Center include interest and capability in basic and applied research, field testing, demonstration and dissemination activities, and leadership training. It should be emphasized that it is concerned not only with discovery of knowledge, but also with its rapid and extensive utilization. Among its basic commitments are the acceleration of the adoption of tested innovations and the improvement of the effectiveness of state leadership in this process.

ADMINISTRATIVE ORGANIZATION AND RELATIONSHIPS

The Center for Research and Leadership Development in Vocational and Technical Education has been established as an independent unit within The Ohio State University's organizational and administrative structure. It maintains close coordination and cooperation with existing programs in specific and related vocational areas and other supporting disciplines on The Ohio State University campus. The Center operates under the University Board of Trustees, with the Director of The Center reporting directly to Dr. John E. Corbally, Jr., University Provost and Vice President for Academic Affairs.

The University has developed the capacity to operate some aspects of The Center program (e.g., information retrieval services, publications) as a non-profit operation as a means of effectively carrying out certain portions of Center activities. Furthermore, The Center has sought additional financial support from foundations and other sources to further develop its program. The Sears Roebuck Foundation made two grants to The Center during the establishment period to underwrite the expenses of seminars in Program Development and Research in Agricultural Education and in Evaluation and Program Planning in Agricultural Education during the summers of 1965 and 1966. Funds were also received from a foundation to support a fellowship for a state staff member in vocational education while he pursued the doctorate degree.

Center staff personnel initiated other proposals to the Office of Education which were subsequently funded to conduct the National Leadership Development Institutes in Technical Education (OEG 3-6-061888-0722) and the National Information Retrieval and Dissemination

System (Amendment 1 to OE 5-85-008). The Research Coordination Seminar held in January, 1966, was a subcontract with Cornell University as a part of OE 6-85-027. Center personnel are alert to identifying and developing a broadened funding base.

Center personnel maintain continuing communication and coordination with the Divisions of Adult and Vocational Research and Vocational and Technical Education, U. S. Office of Education, in planning activities. These relationships avoid duplication of effort, maximize complementary activities, and permit concentration on critical areas confronting the further development and improvement of vocational and technical education.

There follows an organizational chart in Appendix A which depicts the structure of The Center within the University and its relationships to the U. S. Office of Education and other key groups.

National Advisory Committee

The following nationally recognized leaders, representing vocational education, supporting disciplines, and the world of work, serve as a continuing national advisory committee, assisting the University and Center staff in developing a comprehensive program which will best serve the vocational and technical education needs of the nation.

Dr. Walter M. Arnold, Assistant Commissioner, Vocational and Technical Education, Office of Education, Department of Health, Education, and Welfare, Washington, D. C.

Dr. Irwin A. Berg, Chairman Department of Psychology, Louisiana State University

Mr. M. J. DeBenning, State Supervisor of Distributive Education, Oklahoma

Mr. Donald Gilles, State Supervisor of Trade and Industrial Education, Oregon

Dr. Edward Gross, Department of Sociology, University of Minnesota

Dr. T. Marshall Hahn, President, Virginia Polytechnic Institute (Representing the Association of State Universities and Land-grant Colleges)

Mr. John Harmon, Executive Vice President, National Employment Association

Dr. Alberta Hill, Chairman, Department of Home Economics Education, Iowa State University

Dr. Charles W. Hill, Professor, Division of Agricultural Education, Cornell University

Dr. Jacob Kaufman, Director, Institute for Research in Human Resources, Pennsylvania State University

Miss Grace Nangle, State Supervisor, Health Occupations, Massachusetts

Mr. Mark Nichols, State Administrator, Vocational and Technical Education, Utah

Dr. J. Win Payne, Superintendent, Napa Valley Unified School District, California (Named to replace Dr. Grant Venn, formerly Superintendent of Wood County Schools, Parkersburg, West Virginia, who resigned when he accepted the position of Associate Commissioner for Adult and Vocational Education, Bureau of Adult and Vocational Education, U. S. Office of Education)

Dr. Maurice W. Roney, Director, School of Industrial Education, Oklahoma State University

Dr. John Rowlett, Dean, School of Technology, Eastern Kentucky State College

Dr. James A. Sensenbaugh, State Superintendent of Education, Maryland

Mr. Bernard A. Shilt, Director of Business Education, Buffalo Public Schools

Mr. Carroll B. Streeter, Editor, Farm Journal

Mr. Joseph Tuma, Executive Director, Upper Peninsula Committee for Area Progress, United Auto Workers

To provide the stability and continuity needed for such an advisory panel, varied terms extending over several years have been established. Appointments to the continuing advisory panel are made by the Director of The Center, subject to the approval of the administration of The Ohio State University.

The advisory group met at The Center in January, 1966, to assist The Center staff in identifying crucial problems confronting vocational and technical education; in establishing priorities; in identifying both physical and human resources which can contribute to The Center program and purposes; in developing effective coordination and cooperation with other agencies, institutions, and programs; and in evaluating the effectiveness of The Center program. The advisory group also provides two-way communications with key reference groups.

A second meeting was scheduled for July 18 and 19 but had to be cancelled due to the air strike.

Frequent contacts have been maintained with individual advisory committee members between regularly scheduled meetings.

Other Advisory Groups

In addition to the continuing advisory committee frequent use has been made of specialized consultants and ad hoc advisory groups to consult with Center personnel on specific projects and activities. Several of the specialists have developed continuing advisory groups in their substantive areas.

The Center Director has scheduled periodic meetings with the chairmen of relevant University departments to explore mutual problems, to develop complementary activities, and to coordinate efforts. Regular meetings are held with the University Provost and the Coordinating Council comprised of the Deans of the Colleges of Agriculture and Home Economics, Education, and Commerce and Administration, and the Director of the School of Education.

CENTER STAFF

The basic pattern followed in staffing The Center has been to secure a competent, cosmopolitan, balanced staff of alert and dedicated professionals. Individuals have been selected who have shown a breadth of vision and have demonstrated ability to work effectively with a wide range of educators, information science specialists, and personnel from supporting disciplines, and who are committed to the basic purposes and operational approaches of The Center. Advanced training at the doctoral level, field experience, (preferably at the state level), a personal interest and demonstrated ability in research were considered, as was the capacity to effectively plan, organize, and conduct leadership development activities. The individual staff members are recognized nationally as opinion leaders in their spheres of responsibility. They hold memberships and responsible positions in more than a score of nationally-known professional education organizations and honorary fraternities. (See Appendix B for a list of these organizations and fraternities.)

A critical criterion in selection was that staff members be recognized as effective communicators, possessing personal characteristics and professional competencies which would contribute to facilitating and expanding intercommunication and joint effort between vocational and technical education and supporting disciplines.

Additionally, attention was given to securing personnel who were not narrow specialists but, rather, who possessed, in addition to areas of specialization, strong supporting competencies which related to the purposes of The Center and which would support the efforts and activities of other staff members. These combinations of competencies are in harmony with the flexible and adoptive posture of The Center.

A national search has been made to identify candidates for Center positions. Leaders in vocational and technical education and supporting disciplines were solicited to secure nominations of appropriate personnel. To the degree possible, varied background, institutional preparation, and experience have been sought to assure diversity in staffing. The present professional staff members have received their training and/or been employed by a number of nationally recognized institutions of higher education. Appendix C presents the wealth of experience and diversity of institutional heritage represented by the vocational and technical education staff members. This diversity of professional experience and institutional affiliation contributes to The Center's effectiveness in carrying out its interinstitutional and multidisciplinary commitments.

All professional personnel for The Center staff have been secured with the advice and consent of the appropriate academic department at The Ohio State University. The establishment of academic rank and graduate faculty rating have been initiated by the department concerned through appropriate University channels, thereby assuring that any person serving on The Center staff will have acceptance and status with his academic counterparts on campus. This procedure is considered necessary to establish and maintain essential working relationships between The Center staff and supporting departments (e.g., vocational education, education, economics, sociology, psychology), and to provide the means whereby interdisciplinary staff members can maintain their "cutting edge" in their basic disciplines.

Another consideration in staffing has been the recognition that strong departments and staffs in vocational education and supporting disciplines exist on The Ohio State University campus. Therefore, it is believed that the commitments of The Center and existing programs can best be facilitated by bringing new people to The Center staff rather than transferring personnel from existing department programs. Those added to The Center staff provide new insights and supplement the existing strengths on the campus.

STAFFING PATTERN

The staffing pattern of The Center has been to secure a central core of vocational and technical education specialists and to complement these staff members with supporting specialists, visiting specialists, and other supporting staff.

Vocational and Technical Education Staff

These staff members are individuals who possess specialized competence in vocational and technical education. In addition to their speciality, they possess depth of understanding and have demonstrated willingness to work in close cooperation and coordination with other vocational educators, general educators, and those in related disciplines in solving the interrelated problems of vocational and technical education. In a majority of cases they have state staff experience in a state department of education and/or university, or in other institutions or agencies relating to vocational and technical education.

Position	Date of Employment
Director - ROBERT E. TAYLOR B.S., M.S. University of Arizona Ph.D. The Ohio State University Professor of Education and Agricultural Education; Professor of Agricultural Economics and Rural Sociology, Ohio Agricultural Research and Development Center; O.S.U. Experience: State Supervisor of Agricultural Education, Arizona; Director, National Center for Advanced Study and Research in Agricultural Education, O.S.U.	March 1, 1965
Administrative Assistant - H. PAUL SNYDER B.S., M.E. Kent State University, Ohio Experience: Research Associate, The Ohio State University; Superintendent of Schools, Waynesfield, Pandora-Gilboa, and Triway Local School Districts, Ohio; Math and Science Teacher, Solon Local Schools, Ohio	June 1, 1966
Agricultural Education Specialist - JAMES W. HENSEL B.S., M.S., Ph.D. Iowa State University Associate Professor of Agricultural Education, O.S.U. Experience: Assistant Professor of Agricultural Education, University of Wisconsin; Teacher Trainer, Agricultural Education, Iowa State University	August 15, 1965
Business & Office Occupations Education Specialist - HARRY HUFFMAN A.B. Western Michigan University M.A. University of Michigan Ed.D. Columbia University Teachers College Professor of Education, O.S.U. Experience: Professor and Head, Department of Business Education, Virginia Polytechnic Institute;	September 16, 1965

Position	Date of Employment
Associate Professor and Head, Department of Business Education, University of Oklahoma; Associate Professor and Head, Department of Business Education, Georgia Southern College	
Distributive Education Specialist - NEAL E. VIVIAN B.A., M.A., Ph.D. University of Minnesota Associate Professor of Education, O.S.U. Experience: State Supervisor of Distributive Education, Indiana; Associate Professor and Chairman, Department of Distributive Education, University of Tennessee	September 1, 1966
Home Economics Education Specialist - SYLVIA LEE B.S. Oregon State University M.A., Ed.D. Columbia University Teachers College Assistant Professor of Home Economics Education, O.S.U. Experience: State Supervisor of Home Economics Education, Washington; Home Economics Instructor, Secondary schools	February 1, 1966
Technical Education Specialist - AARON J. MILLER B.S., M.S., Ed.D. Oklahoma State University Assistant Professor of Education, O.S.U. Experience: Assistant Professor and Head, Electronics Technology Department, Oklahoma State University Technical Institute; Assistant Professor and Head, Technical Education Department, College of Education, Oklahoma State University; Director of Vocational-Technical and Continuing Education, Oklahoma City School System	August 1, 1966

Position	Date of Employment
Trade and Industrial Education Specialist - CALVIN J. COTRELL B.S. The Ohio State University M.Ed. University of Missouri Ph.D. The Ohio State University Associate Professor of Education, O.S.U. Experience: Senior Research Scientist, American Institute for Research, Pittsburgh; Director, Trade-Technical Teacher Education, Ferris State College, Michigan; Assistant Professor and Teacher Educator, Trade and Industrial Education, The Ohio State University	November 1, 1965

Supporting Specialists

An interdisciplinary and multidisciplinary approach is basic to The Center program. Staff members employed as supporting specialists are those who have specialized abilities, training, and experience in those related disciplines which can augment, complement, and supplement the competencies of the vocational and technical education staff. These staff members may be involved in either team or independent efforts. The personnel sought are recognized as established leaders in their area of scholarship and are willing to devote a significant portion of their professional lives to the interdisciplinary problems involved in vocational and technical education.

Position	Date of Employment
Occupational Sociology Specialist - ALBENO P. GARBIN B.A. Blackburn College, Illinois M.A., Ph.D. Louisiana State University Associate Professor of Sociology, O.S.U Experience: Assistant Professor of Sociology and Anthropology, University of Omaha; Assistant Professor of Sociology and Anthropology, Florida State University	September 1, 1966

Position	Date of Employment
Occupational Psychology Specialist - ROBERT E. CAMPBELL A.B. University of Cincinnati M.A., Ph.D. The Ohio State University Assistant Professor of Psychology, O.S.U. Experience: Psychologist, Division of Counseling, Pennsylvania State University; Private practice, State College, Pennsylvania; Visiting lecturer in Psychology	August 15, 1965
Research & Program Development Specialist - VIRGIL E. CHRISTENSEN B.S. South Dakota State University M.A. University of Minnesota Ph.D. University of Wisconsin Associate Professor of Agricultural Education, O.S.U. Experience: Assistant to Director of Research, Cornell University; Assistant Professor of Vocational Education and Agricultural Education, Cornell University	October 1, 1965
Information Retrieval Division	
Information Services Coordinator - MRS. CELIANNA I. WILSON B.A. Dennison University, Ohio B.S.L.S. Western Reserve University, Ohio Experience: Head, Catalog Department, Battelle Memorial Institute Library, Ohio; Associate Professor of Library Administration and Personnel Librarian, The Ohio State University	January 28, 1966
Index-Abstract Editor - MRS. EUNICE G. LOVEJOY B.A. Madison College, Virginia B.S.L.S. University of North Carolina Experience: Assistant Professor of Library Administration and Research Librarian, Bureau of Educational Research and Service, The Ohio State University; Head, Department Libraries and Social Work Libraries, The Ohio State University	July 1, 1966

Position	Date of Employment
Acquisitions Specialist - CHARLES M. HARRIS B.A., M.A., B.D. Bob Jones University, South Carolina Experience: Director of Admissions, Bob Jones University, South Carolina	March 14, 1966
User Analyst - ROBERT H. WHITE B.S., M.A. New Mexico State University Completing Ph.D. in Vocational Education at The Ohio State University Experience: Vocational teacher; Efficiency training, U. S. Department of Agriculture; Training programs, Captain, U. S. Air Force	August 1, 1966

Interviews were also conducted for personnel in the areas of health occupations, practical arts, labor economics, and dissemination, however, mutually acceptable arrangements were not effected.

A substantial portion of the Director's time was committed to the problem of a talent search and staffing of The Center.

Visiting Specialists

In addition to the permanent Center staff positions which were established to give primary leadership and continuity to The Center program, provision has been made for visiting and consulting staff to provide leadership and assistance in specialized activities and projects on a short-time basis. This procedure provides talents and specialized competencies relating to the immediate problems and activities of The Center from such sources as educational institutions; state education, health, and welfare departments; agriculture; business; private research organizations; industrial organizations; public administration; labor; and management. This category provides a means of testing the feasibility of a particular area of specialization on the continuing Center staff. If experiences gained during the visiting staff support period prove to be essential to the continuing Center program, a position in this area of specialization may be developed. The position of Research and Program Development Specialist was tested in this manner during the initial funding period.

The exchange staff possibilities also enable The Center and other institutions within its sphere of influence to concentrate, for a short duration of time in one location, the essential talents and capabilities needed for the solution of specific problems.

In addition to the advantages inherent in solving the immediate problem there would appear to be substantial benefits accruing to the individual participants, their home institutions, and the profession from this interchange.

The Center has received a substantial number of inquiries from recognized scholars in vocational and technical education who are interested in spending all or a portion of their sabbatical leaves at The Center. One of the major contributions which The Center can make to the profession in the years ahead will be to provide a locus for scholars to do advanced study and reflective thinking. To date, personnel from Southern Illinois University, Pennsylvania State University, Michigan State University have spent sabbatics at The Center and a number of leaves are pending.

Sustaining Staff

It is believed that the expertise of the professional staff will be more effectively utilized and their productivity enhanced by complementing their efforts with the skills of supporting personnel. A research librarian and an editorialist were employed to maximize and complement the efforts of the professional staff. Specialists are also assisted by clerical personnel, research associates, and research assistants.

In harmony with its basic rationale, The Center is providing leadership development opportunities for prospective state leadership personnel through intern experiences for research associates whereby they work directly with the senior staff. These prospective state staff members, now interning at The Center prior to assuming increased responsibility, have the opportunity to be actively involved in and contribute to all elements of The Center program. The same careful process of selection that applies to The Center staff is used in selecting these individuals. (See Appendix D for the range of professional experiences and geographical distribution represented by research associates.)

PROCEDURES FOR CARRYING OUT THE CENTER OBJECTIVES

It is recognized that a center designed to effectively cope with the broad and complex problems in vocational and technical education must use a wide and varying range of means and resources to effectively carry out its objectives. During the initial stage of operation, The Center has had an opportunity to try out a variety of approaches and has gained valuable operational experiences. It has made needed refinements and adjustments and has identified additional procedures for fulfilling its mission.

There follows a description of the primary means which are used in conducting the projected Center program. It is difficult to treat these areas separately because of their effective interplay and mutual reinforcement. Ultimately, all efforts interlock and contribute to the several major thrusts of The Center.

Commitment to the Consortium Approach

Fundamental to the rationale, organizational structure, staffing, and operational procedures of The Center is the recognition of the viability of the consortium approach to the solution or amelioration of many basic problems in vocational and technical education. The Center is structured to provide a mechanism through which the unique capacities and interests of supporting disciplines, institutions, and agencies can be effectively mobilized and focused on major problems.

The institutions and agencies involved in these consortia include such groups as public and private universities and colleges, community colleges, technical institutes, state departments of education, private research organizations, and other public and social agencies relating to vocational and technical education. Involved at appropriate stages are such individuals as industrial, urban, and rural sociologists; manpower and agricultural economists; social, educational, and industrial psychologists; cultural anthropologists; and experimental political scientists. Experiences to date have validated the merits of multidisciplinary approaches.

In planning and conducting Center activities extensive use has been made of personnel form the Departments of Psychology, Sociology, and Economics at The Ohio State University. Further, individuals from the various areas of vocational education and other educational departments (such as educational administration, special education, curriculum, educational research and development) have contributed to planning and conducting Center activities.

Beyond the campus, personnel representing a wide range of disciplines and institutions have been intimately involved in conceptualizing, designing, and carrying out Center activities. Personnel from the U. S. Department of Labor, U. S. Department of Agriculture, and various divisions in the Office of Education have contributed materially to Center efforts.

The Center leadership in establishing consortia approaches has been tested in a number of areas during the initial operation. Perhaps the most notable are the state vocational education leadership research projects which involve personnel from The Center for Occupational Education at North Carolina State University and the University of California and the consortium for providing leadership development institutes in technical education with the following institutions: Rutgers, The State University of New Jersey; the University of Illinois; Oklahoma State University, Colorado State University; and the University of Florida.

The evolving project in developing and testing a model for evaluating state programs of vocational and technical education which will involve the states of New Jersey, North Carolina, Kentucky, and Colorado is an additional example.

It also should be emphasized that in addition to the commitment of The Center to the consortium approach, The Ohio State University, by virtue of its leadership in the establishment of the Committee on Institutional Cooperation (CIC), is well aware of the opportunities and advantages available in a consortium. Furthermore, it would appear that the present framework and structure of CIC are ideally suited to the interdisciplinary and interinstitutional approach basic to The Center program. In the application of the consortium concept, voluntary cooperation is stressed, thereby preserving the autonomy of cooperating institutions and agencies.

Preliminary discussions have been held with Dr. Wendell Pierce, Director of the Compact of the States for Education to be headquartered at Denver, Colorado, concerning joint activities in vocational and technical education. Other efforts toward cooperation include discussions with Dr. Howard B. Aldman, Director of the Appalachia Regional Educational Laboratory, and Dr. Virgil Blanke, Associate Director of the Michigan-Ohio Regional Educational Laboratory, to effect the most desirable working relationships. Discussions also have been held with personnel from the Western States Small School Project; with Dr. Edgar Morphet, Project Director of an eight-states project, "Designing Education for the Future," headquartered at Denver; and with the Vocational Education Committee of the Educational Media Council. Joint endeavors with other state and national research components in education and vocational education are emerging.

For a more complete listing of agencies and organizations that have participated in planning Center activities, the reader is referred to Appendix E. This appendix cites 43 agencies, organizations, and institutions plus the representatives of state departments of education in 49 states and three territories. Appendix F includes a list of institutions of higher education that have had representatives involved in Center activities, including planning, carrying out, and participating in activities. The Appendix F listing include representatives from 48 states and one Canadian province and represents 185 institutions.

In predicting or assessing the potential values of the consortium approach, attention should be given not only to the direct or immediate outcomes from an activity or project but also to those more subtle and enduring benefits, such as improved relationships and understandings. It seems logical that each joint effort will extend, reinforce, and strengthen individual state or institutional efforts and lay the groundwork for more extensive and effective cooperation in the future.

Use of Ad Hoc Committees and Special Consultants

Wide use is made of ad hoc committees and special consultants to supplement the expertise of The Center staff and specialists on the University staff. These individuals bring a fresh perspective to the problem area being studied, provide a means of considering other organizations' viewpoints, provide a critical reaction to proposals of The Center staff, aid in identifying relevant resources, minimize duplicative activities and maximize potential coordination and reinforcement, help develop strategies for introducing planned change, and assist in evaluating Center projects and efforts. Further, it is recognized that the involvement of scholars from all dimensions of the educational and scientific communities provides a two-way yield and contributes to The Center's role as an intellectual clearinghouse. In addition to their contributions to the task, they return to their positions with renewed insight into The Center's efforts and a better understanding of the critical problem areas confronting the profession.

Procedures for Carrying Out Research

The Center's broad commitments in research can be grouped under the headings of research stimulation, research training, research development and coordination, conduct of research, and research dissemination and adoption.

Research Stimulation

One of the responsibilities of The Center is to stimulate needed research on priority problems in a wide range of settings and to assist other groups, agencies, and institutions in strengthening their capacities to attack these problems. It would be easy to commit The Center staff's total efforts to conducting research; however, to do so would be to deny the profession the benefits of the multiplier effect of their efforts in research stimulation and promotion.

Through The Center's comprehensive staffing, broad outlook and outreach, it is logical that it will be in a pivotal position to identify many research and development priorities, far more than it can accomplish with its own staff and resources. Therefore, one of the approaches has been to seek out individual and institutional strengths that are congruent with identified priorities and to provide mechanisms for relating individual strengths of others to the resources needed to effectively cope with the identified problems.

Surveys are made of the research interests of competent personnel, arrangements made for professional leave, or arrangements made to support research activities at their home institution in connection with Center projects and activities.

The foregoing approach promises not only a means of stimulating and strengthening state and regional programs of research and development but also provides the means of enabling a consortium of institutions and agencies to move boldly ahead beyond their traditional programs and become involved in new programs.

Research Training

A variety of procedures have been developed in The Center program to effectively contribute to the training of researchers. Research associates and assistants, through their intern experiences in The Center, grow in their research capabilities. Personnel from other institutions involved in Center research and development activities are provided numerous opportunities to expand their insights and understandings in the research domain. Further, national seminars, workshops, and clinics sponsored by The Center provide additional direct contributions in research training. When the staffing pattern for The Center is completed, the feasibility of developing a postdoctoral research training program for vocational researchers will be explored.

Research Development and Coordination

One of the continuing and compelling needs in the vocational education research effort is to improve coordination among isolated elements of the research community. This can partially be achieved through improved communications. For example, The Center's Information Retrieval Division, publications series, and the clearinghouse function which The Center serves, in a broad sense, all contribute to improved coordination. The research planning conferences and research coordination conferences sponsored by The Center provide further mechanisms for improving the articulation of these compatible efforts.

Through opportunities provided by The Center's organizational structure, researchers interested in priority areas are brought together to investigate the desirability and feasibility of developing common theoretical bases and operational definitions for related research efforts. Also, mechanisms are established for maintaining continuing interaction among relevant researchers during the conduct of coordinate research efforts. The Center maintains communication with the State Research Coordination Units and the Research Development Units.

Among the obvious needs in research stimulation are leadership and assistance in developing major projects. The Center provides support for feasibility studies and mechanisms for "lacing together" interested individuals and institutions in project initiation. This can be achieved by providing consultative services, conducting planning conferences where relevant groups for design and implementation are involved, seeding exploratory efforts, and maintaining effective communication and coordination among interested parties.

Through subcontracts with other appropriate institutions, agencies, and individuals, The Center can stimulate and strengthen its efforts in carrying out specific phases of The Center's efforts.

One of the more workable means for reducing time lag in developing greater awareness of the total research impacting on specific problems to minimizing needless duplication and for reducing inefficiencies inherent in independent literature reviews is by providing a synthesis of research efforts in major problem areas by teams of distinguished scholars. The Center has had seven papers prepared and reviewed by the scholars in Agriculture, Business and Office Education, Distributive Education, Industrial Arts, Technical Education, Home Economics and Trade and Industrial. These research review papers provide both the researcher and the practitioner with ready access to the current accumulated knowledge bearing on significant problems.

Conduct of Research

A significant portion of The Center staff's commitment is to the conduct of research. Typically, these research endeavors are characterized by their team and multidisciplinary approaches. It is recognized, however, that exploratory and feasibility studies need to be conducted from time to time to develop the kind of background and base needed to adequately develop interinstitutional and multidisciplinary research efforts. It is also implicit in The Center operation that much of the research is conducted in cooperation with other institutions, agencies, and groups. Logic dictates that a portion of The Center's resources and research commitments should be addressed to "pioneer type" research. The Center's efforts in this respect are devoted in large measure to perfecting research methodologies, sampling procedures, instrumentations, and summarization procedures in priority areas. These heuristic research efforts can then be made available to personnel throughout the vocational education community for replication in differing administrative settings and populations.

The Center's organizational structure and outreach is used to conduct pilot and experimental research which will be tested in several states, thereby increasing the potential applicability of results and acceptance by the vocational education community.

Research Dissemination

Among the most persistent problems in research and development are those of securing more efficient and rapid dissemination and maximizing the utilization of research results. To attain these optimal goals will require a multichannel approach. In a sense, the total resources of The Center contribute directly and indirectly to these urgent needs. For example, the contacts of the staff with their professional groups and their presentations before regional and national meetings provides viable channels. The total information retrieval and dissemination system is utilized in this area. The publications of The Center, the leadership training activities designed to acquaint state leaders with research results, the function of state leaders as change agents, and the development of media and instructional materials to implement innovative approaches and new programs, all contribute to accelerating the adoption process.

The research associates and others directly involved in the various aspects of The Center program are key communicators in the dissemination of research results in their individual spheres of influence.

The posture of The Center ideally lends itself to contracting for demonstration programs in strategic locations to further accelerate the diffusion of new knowledge and programs.

This responsibility in research dissemination and adoption is not confined to The Center's research efforts but encompasses a profession-wide surveillance of the imaginative, innovative, and tested ideas in this nation and other countries. The substantive focus of this surveillance will embrace vocational education and supporting disciplines. The organizational structure and staffing pattern of The Center are ideally suited to this role.

Procedures for Carrying Out Leadership Development

One of the main procedural areas in The Center's cycle of activities to effect major change in vocational and technical education is leadership development. A pivotal feature in The Center's rationale is that it focus on state vocational education leadership as its primary clientele (e.g., supervisors, teacher educators, curriculum and research specialists).

In-Service Education

The Center's mode of operation has been and will continue to be to first invite state leaders to participate in leadership development activities, many of which grow out of research efforts; and secondly, to provide this power structure with the commitment and ways and means to effect change upon their return home. The ways and means may be in terms of guidelines for state in-service programs and workshops, instructional materials, publications, and research models.

The obvious advantage in focusing on state leadership is that it provides a multiplier effect from The Center's efforts. Predictably, a ripple effect emanates from these activities when the leaders return to their home states.

Procedures for conducting these activities are varied. The length, place, and focus are based upon the primary needs of state leaders to effect major changes and improvements in vocational and technical education. Leadership development activities are conducted off campus when the resources of other institutions or agencies are best suited to the substantive focus of the leadership development activity.

Typically, national planning committees representing the specific target group and personnel with supporting expertise are invited to consult with The Center staff in planning these activities. Nationally recognized consultants are invited in advance to present papers dealing with specific subelements of the problem area. Appropriate seminar reports are issued to participants and to other groups, thereby making an additional contribution to the literature of the field. These leadership development activities are also used to help identify needed research and development projects, locate needed resources in implementing these projects, assess participants' interests in future activities, and build essential communication channels. Each activity is evaluated both in terms of process and product.

Individual Study Opportunities

The Center has become increasingly more proficient in providing the opportunity and locus where leaders in vocational and technical education and scholars from supporting disciplines can pursue independent studies and investigations, utilizing The Center and University resources, and contribute to the growing edge of knowledge and practice in vocational and technical education. The Center's growing research library provides a dimension that supplements the staff and clearinghouse resources.

Individuals availing themselves of this opportunity might be state staff members, graduate students, postdoctoral scholars, or representatives of public and private research agencies who are actively engaged in research efforts or individual studies relating to vocational education in their states. To date, senior staff members from Michigan State University, Oklahoma State University, Pennsylvania State University, the University of California, and local public school systems have utilized this opportunity.

The Center staff serves a valuable clearinghouse function by directing interested research workers to other institutions and individuals engaged in work related to their investigation. There have been increased requests from distinguished scholars within the profession to provide a "think tank setting" or location for contemplation and projective thinking. If we are to break with tradition, the research and development community needs an appropriate working atmosphere with freedom for the generation of innovative studies and fresh approaches.

Visiting and exchange staff personnel from other universities and agencies are utilized in The Center program. This approach provides The Center with talents that cannot be secured on a permanent basis, contributes to an effective intercommunication throughout the profession, and assists The Center staff in maintaining continuing awareness of the critical problems confronting communities, states, and the nation.

Graduate Education

One of the basic concepts upon which The Center is structured is that it should complement and enhance, not duplicate, the programs of existing institutions and agencies. A major aspect of its role is to contribute the leadership structure needed to provide "capstone" experiences and opportunities for present and prospective leaders in vocational and technical education.

The Center offers no graduate courses. It is organized as an independent unit on The Ohio State University campus and is not a teaching department. However, to provide opportunities for Center staff members to interact with their colleagues in specific academic areas and to supplement the professional experiences for prospective state staff leaders interning at The Center, senior Center staff members are approved to advise graduate students and teach a limited number of graduate courses. It is understood that staff members in established departments of vocational education on The Ohio State University campus may also serve as advisors to Center research associates and assistants. The University administrative framework for graduate education is followed. The existing course structure of departments directly involved and of supporting areas is utilized to fulfill the graduate education responsibilities of The Center.

Intern Opportunities

One of the most promising means of developing broad-gauged leadership for state programs of vocational and technical education is through intern experiences which supplement formal advanced study. Intern experiences at other institutions and agencies within the consortium may be utilized to supplement The Center program. These might include experiences in state departments of education, involvement with research projects, staff responsibilities at other institutions, work experiences in the Office of Education or its regional offices.

Procedures for Implementing a National Information Storage and Retrieval System (as an ERIC Clearinghouse)

It is recognized that much of the detailed operational procedures for the information retrieval system remain to be evolved with the central ERIC and the other clearinghouses. The general procedures developed in providing a national informational retrieval system for vocational and technical education as a continuing division of The Center follow.

1. Materials and sources of materials to be introduced into the system are identified by subject-matter specialists and appropriate representatives of the profession.
2. Potential user groups and their information needs are determined through consultation with subject-matter specialists at The Center, vocational and technical education staff members at the University, and members of the profession located throughout the nation who have differing types and levels of leadership responsibilities.
3. Operational criteria for categories and kinds of materials to be included and criteria for quality control of items to be abstracted or treated in other ways are established through consultation with subject-matter specialists.
4. Materials are acquired by:
    -- Soliciting the assistance of various research and development units in identifying and forwarding appropriate vocational and technical materials to the Information Retrieval Division at The Center.

-- Contacting associations and agencies primarily concerned with vocational education research, requesting them to submit appropriate materials to the IR Division.

-- Establishing direct contacts with universities having research programs in the substantive field.

-- Establishing contact with the regional educational laboratories and Title III projects which have major information retrieval and dissemination components.

-- Collecting programs from professional meetings to obtain a list of ongoing research activities and papers that are to be presented and determine whether this information is contributory and useful to both vocational and technical education and the research and development activities in this area.

-- Making a determined effort to establish a surveillance network among recognized scholars in the profession. The probability and feasibility of their becoming prime input sources for The Center continues to be investigated. For example, scholars working in major research areas are asked to alert The Center concerning emerging research and supporting literature that might appropriately be included in the information retrieval system. This approach should assure more adequate coverage, particularly for emerging and peripheral materials. Professional contacts and working relationships of Center vocational education specialists with colleagues in the field will be utilized to further enhance this surveillance system.

5. Operational procedures are established to process materials in harmony with the requirements of central ERIC (USOE). The experiences gained by other information retrieval systems in education and other subject-matter areas are utilized in establishing appropriate work flow procedures and forms. Continuing system analyses are maintained. The results of these analyses will provide a basis for system refinement and improvement.

6. Linkage with central ERIC, ERIC units, and other information retrieval systems through correspondence, site visits, and staff contacts provides a means to:

   -- Develop a working coordinate index system and thesaurus for vocational and technical education, utilizing the experiences of the Panel on Educational Terminology and other IR systems.

   -- Participate in the further development of a compatible indexing system which will contribute to a universal thesaurus or taxonomy of education.

   -- Further delineate parameters of substantive focus and responsibility, thereby assuring more adequate coverage of the educational field with minimal overlap and duplication. Contacts are maintained with other ERIC units to identify the prime responsibility of each information retrieval system and to establish boundaries of responsibilities, thereby minimizing duplication and maximizing complementary and supplementary efforts. As other information retrieval systems are established which relate directly to the substantive focus of vocational and technical education, communications will be effected.

-- Exchange information and "know-how" concerning the operational aspects of information retrieval systems.

-- Develop cooperative programs which increase the effectiveness of information and retrieval programs.

-- Maintain continuing liaison with the ERIC staff and participate in appropriate meetings and activities sponsored by that agency.

-- Minimize duplication with the vocational and technical programmatical and administrative data being gathered through other emerging systems (e.g., The Vocational Education Information System (VEIS) and The Basic Educational Data System (BEDS) in the U. S. Office of Education).

7. Continuing analysis of users and potential users of the system is made to determine the type and scope of information retrieval, storage, and dissemination system needed to provide maximum service to the profession.
8. Bibliographic data, abstracts, and index terms have been prepared, using the ERIC resume form which will be microfiched. Index terms will be entered in the optical coincidence system.

The direct services which will be made available to researchers and others in the profession follow.

1. Microfiche, abstracts, and other forms of information will be made available, and specialized substantive questions from user groups will be answered.
2. A major thrust of the Information and Retrieval Division will be directed toward dissemination activities. This function will complement and reinforce other research and development activities of The Center. Among the primary means of diffusion is a projected publication series which will complement Research in Education published by central ERIC. Plans have been formulated during the establishment period to provide for the following media.
   - -- An information manual prepared primarily for research workers and others in vocational and technical education. which will be designed to acquaint them with the information retrieval system and how they may achieve maximum benefits from the service. Types of services available and suggestions for framing request questions will be included.
   - -- A descriptive leaflet for interpreting the services of the IR Division, to supplement letter requests for potential input information, and for general communication use.
   - -- A quarterly series which will supplement the national publication issued by ERIC.
   - -- Research digest papers to provide a review, summary, and synthesis of the research and other literature in the field. Such papers will prove of value to researchers

and practitioners in quickly ascertaining current stage of developments in various areas of the field and will provide a basis for purging the IR system of materials which have only transient importance.

-- Topical bibliographies to be developed in response to certain questions which have been posed with a high degree of frequency.

-- The thesaurus of vocational and technical education index terms to be circulated to a selected audience.

3. The feasibility of utilizing existing professional journals to achieve optimal dissemination will also be explored (e.g., journals, newsletters, and other media will be used to inform various professional associates of the purpose and function of the IR Division at The Center). Presentations by The Center staff at regional and national meetings will be another method of reporting services available from the IR Division of The Center. Other communication possibilities include information booths at major professional meetings, such as the American Vocational Association.

Currently, as a part of The Center operation, a monthly newsletter (Centergram) with a circulation of 2,500 provides a general communication channel to the profession.

4. Training conferences and seminars are being planned for professional workers. These will be conducted at The Center, at national meetings of the American Vocational Association, and in other regional locations to:

-- Stimulate them to use the system.

-- Provide users with requisite skills, thereby increasing benefits from their use of the IR system.

-- Elicit additional cooperation in assuring thorough coverage of the literature.

-- Work with professional leaders responsible for graduate education research and project leaders of approved U. S. Office of Education research training grants to integrate into the preparation of future research workers an understanding of the use, benefits, and services of the IR system.

5. Information retrieval services which are needed by user groups in the profession and may be beyond those presently prescribed by central ERIC will be provided.

A variety of research and evaluative approaches are being developed to determine the effectiveness, efficiency, and adequacy of the information retrieval and dissemination system.

Research and development activities will be carried out in conjunction with the research and development components of The Center program and such other compatible activities as the University graduate program in information science and The Ohio State University ERIC Clearinghouse for Science.

International Vocational Education

The visibility of The Center and its diverse and extensive contacts make it an appropriate vehicle for vocational educators from the United States and other countries to share knowledge and experiences.

Through The Center's Information Retrieval Division and the knowledge and alertness to developments in vocational and technical education throughout the United States by The Center staff, visiting international vocational educators have been directed to outstanding efforts which correspond with their specific interests and needs. Incident to this, assessments are being made by The Center staff of institutional strengths and interests in working with international vocational educators.

Negotiations have been started, in cooperation with the University, to bring Dr. Torsten Husen of the University of Stockholm to The Center to consult with Center staff and assist with Center projects.

Seminars are planned to draw on the expertise of internationally recognized leaders in vocational and technical education as a means of "bridging the gap" between outstanding developments and innovations from other nations which hold promise for alleviating problems confronting vocational education in this country, acquainting leaders in the United States with these developments, establishing continuing dialogue, and exploring the feasibility of replicative studies, evaluation studies, or demonstration projects.

Procedures and Criteria for Determining The Center Program

A wide range of procedures and resources are actively utilized in determining The Center's program. These resources include the national advisory committee for The Center, ad hoc committees, consultants, visiting staff, and consultation with the Divisions of Adult and Vocational Research and Vocational and Technical Education in the U. S. Office of Education. Through interaction of The Center staff further inputs and insights are developed to assist in establishing priorities and emerging concerns. Specific considerations involved in establishing these priorities follow:

- -- Evidences educational significance; the degree to which the proposed priority project or activity makes a national contribution to progress and improvement in vocational and technical education.
- -- Falls within the purview of Center responsibilities and its objectives and scope of work, is not duplicative of other current efforts, and is not the assigned responsibility of other agencies and organizations.
- -- Indicates that potential yield and benefits from the project compare favorably to other alternatives and that the inputs and economic costs are justified in terms of anticipated value of the results. Consideration is also given to potential "multiple yield" from projected projects (e.g., implications for research, development, and leadership training).
- -- Effectively maximizes the unique contributions of the resources of The Center; is an appropriate Center undertaking.
- -- Typically requires interinstitutional and multidisciplinary approach for solution.
- -- Represents creative and innovative effort.

ACCOMPLISHMENTS OF THE CENTER

Achieving the establishment, within a University community, of a complex organization such as The Center with its national outreach; securing, testing, and refining procedures; and effecting relationships; are in themselves recognized accomplishments. The time demanded to breathe life and vitality into such an organization has limited the kinds of outcomes which could logically be expected of an established, ongoing unit. It is recognized that while The Center has made rapid progress in staffing, evolving procedures, and relationships, time constraints have not permitted achieving its creative and innovative potential. In addition to the organizational status and momentum achieved to date, there have been accomplishments in the three broad areas of commitment: Research, leadership development, and provision for a national information retrieval system. Some of these are reported as specific projects and events. There are, however, other more extensive, subtle, and intangible accomplishments more difficult to identify, but it is in this intangible area that the greatest potential capacity has been developed. These accomplishments, for example, relate to the development of organizational structure, working relationships, operational experiences, and staff orientation and commitment.

Before reporting these accomplishments, it should be recognized that one of the pivotal concepts in The Center's long-range strategy for effecting change is the recognition of the key role of state leadership personnel in vocational and technical education (e.g., supervisors, teacher educators, specialists in research and curriculum, and others). In the main, these individuals are viewed as the primary clientele of The Center. Furthermore, the strategy for change has dictated that since these individuals occupy key leadership positions and are responsible for shaping administrative policies and providing program leadership, efforts to extend their vision, increase their competency, and improve their effectiveness should pervade vocational and technical education. This assumption underlies the initial emphasis by The Center on leadership development programs for state personnel. The territories of Guam, Puerto Rico, and the Virgin Islands, and 49 state departments of education have had staff members participate in Center activities. In addition, state vocational education leaders from 185 institutions of higher education have participated during the past sixteen months. (See Appendix F for a list of these institutions.) This early concentration of efforts was carried out with the conviction that:

1. There was an urgent need for these activities as a means of coping with the critical problems inherent in fulfilling the expectancies of P.L. 88-210.
2. The return on investments of time and resources in this area was almost immediate and since state leaders were involved it was a "wholesale" approach (infusing ideas and procedures into the vocational education power structure).
3. Since it was not possible to secure all Center staff personnel at the same time, initial emphasis on leadership provides a good "take-off" until the critical mass of staff can be assembled for a broader confrontation in research and other areas.

4. This emphasis was sound in terms of long-range development and change strategy. These training activities provided close contact with our prime clientele, gained understanding and acceptance of the leadership role of The Center, helped establish essential rapport and relationships which should facilitate later dissemination of research findings, and provided a means of securing wide exposure to research and development needs and for identifying the resources available and personnel interested in contributing to these needed research efforts.

The following pages report the accomplishments in individual activities undertaken during the initial funding period. Several of the projects were completed during this period; others were only begun and are continuing efforts.

While these specific projects and activities are reported as completed, there are many follow-up activities which logically grow out of these initial efforts in the research, development, and training domains.

In assessing these activities, it should be emphasized that all Center staff members contribute in a supporting and consulting role to the total efforts and activities of The Center. Also, it will be noted that these efforts involve other institutions and agencies and have evolved from careful planning, broad involvement, and a continuing dialogue with educational leaders.

In order to fulfill the dissemination commitment of The Center, several publications have been prepared in connection with the projects and activities. A list of these publications is contained in Appendix G.

1. National Clinic for State Supervisors of Business and Office Occupations, May 24-27, 1965 (in cooperation with the Division of Vocational and Technical Education, U. S. Office of Education)

   Purpose:

   The major purpose of this clinic was to give impetus to the development and expansion of business and office education programs.

   Objectives:

   1. To improve and promote state supervision of business and office education;
   2. To develop guidelines for state supervisors of business and office education covering the following topics:
      a. Responsibilities: Leadership, program balance, definitions of business and office education, learning experiences, youth groups, facilities, and curriculum
      b. Operations: Performance standards; reporting systems and fiscal administration; "under contract" provisions: private schools, materials development, teacher education; research; professional organizations; in-service conference, workshops, and clinics
      c. Relationships: Public relations and survey procedures, policies and professional services, direct areas:

U. S. Office of Education, staff, related vocational staff, departmental staff, other state departments, communities, school visitations, local supervisors, teachers, personal development

Clientele Served:

Sixty-one state supervisors and prospective state supervisors from 28 states participated at their own or their state's expense.

Consultants:

Dr. Richard Fulton, Executive Director and General Counselor, United Business Schools Association, Washington, D. C.

Mr. Hollis Guy, Executive Director, National Business Education Association, Washington, D. C.

Dr. J. Marshall Hanna, Professor of Education, The Ohio State University

Dr. Byrl Shoemaker, State Director of Vocational Education, Ohio

Mr. Arthur L. Walker, Consultant, Business and Office Education, Richmond Professional Institute, Virginia

Dr. E. E. Holt, State Superintendent of Public Instruction, Ohio

Dr. Harry Huffman, Professor of Business Education, Virginia Polytechnic Institute

Dr. Fred Cook, Professor of Business Education, Wayne State University

Mr. Bernard Shilt, Supervisor of Business Education, Buffalo, New York, (Vice President Elect, AVA, Business and Office Education Division)

Mr. Clifford Cox, Community Action Service, Ohio Department of Economic Opportunity

Mr. Gus J. Bauer, Hospital Care Corporation, Cincinnati, Ohio

Accomplishments:

1. The preliminary materials from the conference were sent to all participants and to the states which did not have representatives at the meeting, thereby assisting them in the development of their programs of business and office education.
2. The guidelines have been published. These guidelines were written by Mr. R. D. Balthaser, State Supervisor of Business and Office Education, Ohio; edited by Mr. A. L. Walker, former State Supervisor of Business Education, Virginia, and reviewed by Dr. Bruce I. Blackstone, Head, Office Occupations Education, Division of Vocational and Technical Education, U. S. Office of Education.

2. **National Vocational-Technical Education Seminar on the Administration of Research (Sub-contract with the University of Illinois), May 24-27, 1965**

Purpose:

The central focus of this seminar was to improve the quality and quantity of research and development in vocational education.

Objectives:

1. To develop a concept of the role of research and development in state programs of vocational education and the conditions essential to its success;
2. To develop an understanding of a functional organizational structure for conducting a program of research and development in vocational education;
3. To clarify key individual and organizational roles and relationships;
4. To develop competencies in administering a program of research and development;
5. To develop an understanding of the dynamics of planned change and its application to vocational education;
6. To develop empathy and support for research and development in vocational education.

The seminar was structured and carried out in such a way as to provide the participants with the broadest possible perspectives for planning comprehensive programs of research and development in vocational education.

Clientele Served:

Thirty-three participants from 25 states attended the seminar. Sixteen represented colleges, universities, and training institutions and seventeen represented state departments of education.

Consultants:

Dr. Ralph E. Bender, Chairman, Department of Agricultural Education, The Ohio State University

Dr. Orville J. Bentley, Dean, College of Agriculture, South Dakota State University

Dr. Henry M. Brickell, Assistant Superintendent, Manhasset Public Schools, New York

Dr. V. E. Burgener, Chief of Research and Statistics, State Department of Education, Illinois

Mr. Robert Burton, Laboratory Director, E. I. DuPont De Nemours and Company, Circleville, Ohio

Mr. David Bushnell, Director, Division of Adult and Vocational Research, U. S. Office of Education

Dr. David L. Clark, Professor of Education, The Ohio State University

Dr. Joe Clary, Associate State Director of Vocational Education, North Carolina

Dr. Desmond L. Cook, Professor of Education, The Ohio State University

Dr. John E. Corbally, Jr., Vice-President for Administration, The Ohio State University

Dr. Calvin J. Cotrell, Assistant Director for Vocational Education, American Institute for Research, Pittsburgh, Pennsylvania

Mr. Frank C. Croxton, Assistant Director, Columbus Laboratories, Battelle Memorial Institute, Columbus, Ohio

Dr. Egon Guba, Professor of Education, The Ohio State University

Mr. Charles L. Langdon, Director, Research Coordinating Unit, State Department of Education, Michigan

Dr. Roy A. Larmee, Professor of Educational Administration, The Ohio State University

Dr. Allen Lee, Assistant State Superintendent for Education Development, Oregon

Dr. Herschel Lester, Jr., Director of Vocational Education Research, University of Georgia

Dr. Duane M. Nielsen, Director, Educational Resources Development Branch, Occupational Research and Planning, Division of Vocational and Technical Education, U. S. Office of Education

Dr. Alan Robertson, Associate in Vocational Education Research, State Department of Education, New York

Dr. Everett J. Rogers, Professor of Communications, Michigan State University

Dr. Carl Schaefer, Chairman, Department of Vocational Technical Education, Rutgers, The State University

Dr. Edward R. Towers, Professor of Education, The Ohio State University

Accomplishments:

Fourteen of the 25 states represented received approval and funding for vocational education research coordinating units in 1965.

Nine of the 25 states represented designed research coordinating units in 1966.

Twenty-three of the 25 states represented at this seminar have plans for or organizational structures now in operation for purposes of administration of research in vocational education.

Follow-up Activities:

A 1967 seminar with emphasis on research management is planned as the next in a series following this seminar and the January, 1966, Seminar on Research Coordination. It is expected that the directors of the state research coordinating units will be one target group.

3. A National Seminar on Agricultural Education-- "Program Development and Research," August 9-13, 1965 (Supported by Sears-Roebuck Foundation)

Purpose:

The major purpose of the seminar was to provide an opportunity for state leaders in vocational agriculture and vocational education to project their thinking and formulate plans for initiating and improving state programs of research and development.

Objectives:

The participants addressed themselves to the key objectives of the seminar which involved the leadership role of state staffs in:

1. Developing plans for comprehensive, continuing state programs of research and development.
2. Utilizing outside resources to assist in program development and research.
3. Planning, conducting, and evaluating pilot programs.
4. Facilitating the adoption of new programs in agricultural education.
5. Identifying sources of funds for program development and research activities.
6. Reviewing and planning regional research programs.

Clientele Served:

Over 68 state and national leaders in agricultural education, vocational education, and supporting disciplines, representing 31 states, met at The Center.

Consultants:

Nationally known educational leaders served as resource personnel during the seminar. These individuals were selected for their leadership and their unique contributions to the specific purposes of the seminar.

The names of these consultants are as follows.

Dr. Lloyd J. Phipps, Chairman, Department of Agricultural Education, University of Illinois

Dr. Orville E. Thompson, Chairman, Department of Agricultural Education, University of California, Davis

Dr. Duane M. Nielson, Director, Educational Resources Development Branch, Occupational Research and Planning, Division of Vocational and Technical Education, U. S. Office of Education

Dr. John K. Coster, Professor of Agricultural Education, University of Nebraska

Dr. L. S. Kellogg, Director of Research, John Deere and Company

Dr. Glenn Z. Stevens, Professor of Agricultural Education, Pennsylvania State University

Dr. Marvin G. Linson, Assistant State Director of Vocational Education, Colorado

Dr. Glen H. Strain, State Director of Agricultural Education, Nebraska

Dr. George L. O'Kelley, Jr., Professor of Agricultural Education, University of Georgia

Dr. Daryl J. Hobbs, Associate Professor of Rural Sociology, University of Missouri

Dr. James E. Christiansen, Research Associate, The Center for Vocational and Technical Education

Mr. S. S. Sutherland, Emeritus Professor of Agricultural Education, University of California, Davis

Mr. H. Neville Hunsicker, Head, Agricultural Education Occupations Branch, Division of Vocational and Technical Education, U. S. Office of Education

Accomplishments:

Opportunity was provided for maximum interaction by seminar participants. Some of the program features included presentations by resource people, panel discussions, committee work, and group discussions.

Participants questioned resource people and reacted to their contribution within small group discussions. Provision was made for subgroup meetings to focus on key questions in the areas of program development and research.

Follow-up Activities:

A conference summary report, "National Seminar in Agricultural Education--Program Development and Research," was sent to head state supervisors and head teacher educators in agricultural education in the fifty states.

4. Training Session for Personnel Who Will Be Conducting Regional Leadership Development Conferences in Distributive Education, November 22-23, 1965

Purpose:

The central thrust of this activity was to provide training and materials to personnel who will be responsible for conducting regional leadership development conferences in distributive education.

Objectives:

1. To transmit the experiences gleaned from the pilot leadership development conference conducted at the University of Wisconsin to other leaders;
2. To assist leadership development conferences leaders with program development procedures and operational techniques, including the provision of materials;
3. To develop a procedure for approaching the distributive education profession to secure needed support and participation;
4. To identify geographical areas to be served by the individual conferences.

Clientele Served:

Eight representatives of universities and state departments of education who were recognized leaders in distributive education and who agreed to conduct national or regional conferences during the next two years were in attendance. They were:

Mr. Donald P. Jaeschek, Professor of Education, University of South Florida

Mr. J. C. Levendowski, Teacher Educator of Distributive Education, State Department of Education, California

Dr. William B. Logan, Professor of Distributive Education, The Ohio State University

Mr. Bernard Nye, State Supervisor of Distributive Education, Ohio

Mr. G. Dean Palmer, College of Commerce, Montana State University

Mr. Charles W. Steadman and Mr. Irvin H. Iwler, Teacher Educators of Distributive Education, University of Pittsburgh

Dr. Neal E. Vivian, Professor of Education, University of Tennessee

Consultant:

Dr. Harland E. Samson, Associate Professor of Education and Commerce at the University of Wisconsin, who had conducted a pilot conference during the summer of 1965, was the workshop leader and chief consultant.

Accomplishments:

The conference resulted in the preparation of eight potential leaders for their responsibilities in planning, organizing, and conducting a regional leadership development conference in distributive education. Plans were formulated for discussing the proposed conferences with distributive education personnel in attendance at the American Vocational Association national meeting in Miami and for formulating general guides covering states to be served by each of the regional conferences. Further, the participants benefited from the experiences of the pilot conference which had been conducted earlier at the University of Wisconsin. A suggested format for the forthcoming conferences was developed and materials were distributed.

Follow-up Activities:

The Center and Dr. Samson are maintaining contact with the prospective leadership conference personnel to provide needed assistance and encouragement.

5. Research and Training Proposal and Addendum.
A Determination of Needed Adjustments and
Extensions in the Curricular Patterns of
Vocational Education in Agriculture
October 1, 1964, to December 31, 1965
(Separate contract OE 5-85-009)

Purpose:

The controlling purpose of this effort was to assist states in accelerating the development of instructional programs in off-farm agriculture.

Objectives:

1. To identify the major occupations which require competency in agriculture;
2. To determine the agricultural competencies needed by workers in these occupations;
3. To cluster the major agricultural occupations which require similar competencies;
4. To develop and refine the curricular guides and supporting materials which are most needed and feasible for the major clusters of agricultural occupations;
5. To examine the summary data for other implications in redirecting vocational agriculture (e.g., programs for disadvantaged youth, needed adjustments in administrative and supervisory procedures);
6. To train key state leaders in the use of the curricular guides and supporting materials.

Clientele Served and Project Background:

This project had its origin in the National Research Coordination Conferences on Off-farm Agricultural Occupations sponsored by The National Center for Advanced Study and Research in Agricultural Education and the Agricultural Education Branch of the U. S. Office of Education in May of 1963 and January of 1964. These conferences were designed to assist states in undertaking studies of off-farm agricultural occupations training needs.

Subsequently, The Center was given a grant (OE 5-85-009) by the Bureau of Adult and Vocational Research to synthesize these studies, develop needed instructional and program materials, and conduct training conferences on their use.

The task force of thirty people from sixteen states included personnel with a wide range of backgrounds and responsibilities in agricultural education, vocational education, agricultural technology, and agricultural industry. Several project advisory meetings were held to secure needed cousel from diverse but relevant groups and to help the task force maximize the potential benefits and uses of these materials.

Project Staff:

The following task force staff was assembled to accomplish the objectives of the project.

Dr. H. M. Hamlin, Co-leader, Professor Emeritus of Vocational Education, University of Illinois

Dr. Glen Z. Stevens, Co-leader, Professor of Agricultural Education, Pennsylvania State University

Dr. George Luster, Associate Professor of Vocational Education, University of Kentucky

Mr. Alan Kahler, Teaching Assistant in Agricultural Education, Iowa State University

Mr. Howard Nowels, Teacher of Vocational Agriculture, Fremont, Ohio

Mr. Peter J. Wotowiec, Teacher of Vocational Horticulture, Cleveland, Ohio

Mr. William Becker, Teacher of Vocational Agriculture, Janesville, Wisconsin

Mr. Donald Seaman, Graduate Student in Agricultural Education, Ohio State University

Mr. William Stevenson, Director of State Occupational Needs Study, Oklahoma State University

Dr. Julius H. Lintner, Former Assistant State Supervisor of Agricultural Education, Ohio

Mr. James Utzinger, Teacher of Vocational Horticulture, Grove City, Ohio

Dr. Jerry J. Halterman, Instructor of Agricultural Education. Modesto Junior College, California

Consultants:

Many individuals from government, business, industry, and education have served as resource persons at various stages of this project. They include the following.

Mr. Charles N. Whitney, Executive Director, Farm and Power Equipment Retailers Association, Columbus, Ohio

Mr. Theodore Caesar, Personnel Development Director, The Farm Bureau Cooperative, Columbus, Ohio

Mr. William C. Boykin, Head Teacher Trainer of Agricultural Education, Alcorn A. and M. College, Lorman, Mississippi

Dr. Leon W. Bonner, Head Teacher Trainer of Agricultural Education, A. and M. College, Normal, Alabama

Dr. Harold M. Byram, Chairman, Department of Agricultural Education, Michigan State University

Mr. Joseph Duncan, Labor Economist, Battelle Memorial Institute, Columbus, Ohio

Dr. Harold Binkley, Chairman, Department of Agricultural Education, University of Kentucky

Dr. Raymond M. Clark, Professor of Agricultural Education, Michigan State University

Dr. James Clouse, Teacher Trainer of Agricultural Education, Purdue University

Dr. John K. Coster, Acting Chairman, Department of Agricultural Education, University of Nebraska

Mr. R. E. Geyer, Executive Secretary, Committee on Educational Policy in Agriculture, National Academy of Sciences, Washington, D. C.

Mr. Charles L. Langdon, Vocational Agricultural Education, State Department of Public Instruction, Michigan

Mr. Ivan McGee, Agricultural Education Department, Pennsylvania State University

Dr. Lloyd J. Phipps, Professor and Chairman, Division of Agricultural Education, University of Illinois

Dr. Robert C. Anderson, Department of Sociology, Michigan State University

Mr. Ray Brush, Secretary, American Society of Nurserymen, Washington, D. C.

Dr. John A. Beaumont, Director, Occupations Branch, Division of Vocational and Technical Education, U. S. Office of Education

Dr. C. E. Bundy, Professor of Agricultural Education, Iowa State University

Mr. Dolph Camp, Chief, Occupational and Career Guidance Section, U. S. Office of Education

Mr. M. J. Clark, Itinerant Teacher Trainer of Agricultural Education, Southern University, Baton Rouge, Louisiana

Dr. Franklin Eldridge, Director of Resident Instruction, College of Agriculture and Home Economics, University of Nebraska

Mr. T. L. Faulkner, State Supervisor of Agricultural Education, Alabama

Mr. Norman H. Foote, Chairman, Division of Agriculture and Ornamental Horticulture, State University Agricultural and Technical College, Farmingdale, New York

Mr. George G. Greenleaf, Executive Vice President, Ohio Grain and Feed Dealers, Worthington

Mr. Paul M. Hodgson, Assistant State Superintendent for Vocational and Technical Education, Delaware

Dr. Donald R. Kaldor, Professor of Economics, Iowa State University

Dr. David McClay, Chairman, Department of Agricultural Education, Pennsylvania State University

Mr. E. M. Norris, Head and Professor of Agricultural Education, Prairie View A. and M. College, Texas

Mr. R. C. S. Sutliff, Chief, Bureau of Agricultural Education, State Department of Education, New York

Mr. J. W. Warren, Agricultural Education, Agricultural and Technical College, Greensboro, North Carolina

Dr. Homer V. Judge, Department of Agricultural Education, University of Massachusetts

Mr. Robert E. Steffy, Department of Agricultural Education, Pennsylvania State University

Mr. William Hull, Department of Agricultural Education, Pennsylvania State University

Dr. J. R. Warmbrod, Assistant Professor of Agricultural Education, University of Illinois

Mr. V. B. Hairr, State Supervisor of Agricultural Education, North Carolina

Mr. Martin Rehmert, Vocational Agriculture Teacher, New Knoxville, Ohio

Mr. Earl Scott, MDTA Instructor, Jefferson City Schools, Jefferson, Ohio

Mr. Robert H. White, Graduate Assistant, Department of Agricultural Education, The Ohio State University

Accomplishments:

As a direct result of this project, a series of publications was produced and made available to leaders in vocational education. A complete list of this series follows. The number in parentheses indicates the number of copies of sets which have been distributed to states at their request on a cost basis.

1. Policy and Administrative Decisions in Introducing Vocational and Technical Education in Agriculture for Off-farm Occupations (1044)

2. Vocational and Technical Education in Agriculture for Off-farm Occupations (1423)

3. Summary of Research Findings in Off-farm Agricultural Occupations (741)

4. Planning and Conducting Cooperative Occupational Experience for Off-farm Agriculture (1398)

5. Occupational Guidance for Off-farm Agriculture (1319)

6. Horticulture - Service Occupations (Course outline and twelve modules) (942)

7. Agricultural Supply - Sales and Service Occupations (Course outline and twelve modules) (999)

8. Agricultural Machinery - Service Occupations (Course outline and sixteen modules) (1111)

9. Agricultural Chemicals Technology (Course outline and nine modules) (170)

In developing these instructional materials, prime consideration was given to the data revealed by the studies of agricultural business and employee training needs conducted in several states. Current and projected employment opportunities dictated the areas in which instructional materials were developed. In addition, these studies identified those occupations which require knowledge and skill in agriculture. They also contributed to the development of the publication series through the identification of specific competencies needed by individuals for entry and persistence in agricultural occupations.

Members of the task force were aided in the development of these publications through personal visitations to outstanding existing off-farm agricultural occupations programs.

Frequent consultations with trade association educational committees and agricultural industry leaders concerned with personnel development were helpful in further "keying" these materials to employment needs. Existing materials were carefully reviewed and evaluated in terms of their utility in the preparation of these workers and, when suitable, were recommended as a part of these publications.

A National meeting on off-farm agricultural occupations was held in Columbus, Ohio, in May of 1965 to begin dissemination of the materials developed. There were 160 participants, representing 49 states and Puerto Rico, who attended the Columbus meeting.

Following the national meeting at The Center, the task force staff conducted five regional meetings to further disseminate the findings and materials developed by the staff. The regional meetings were held in New York City; Chicago, Illinois; Pullman, Washington; Denver, Colorado; and Atlanta, Georgia. The regional meetings, which were attended by a total of 347 people representing 42 states, were designed to encourage attendance by local teachers as well as state supervisory staff members and teacher educators.

Following the first draft of each publication by The Center, copies were sent to a wide range of knowledgeable individuals for review and evaluation. Reviewers included experienced teachers in vocational agriculture and other vocational services, college and university specialists in the appropriate subject-matter area, supervisory and research personnel, and agricultural business and industrial leaders.

The wide variety of off-farm agricultural occupations reported by 39 states indicated a need for an additional dimension to be added to the project. A publication concerning occupational guidance included a system for clustering or grouping the occupations into instructional areas.

Hundreds of occupations requiring a knowledge of agriculture were identified as a direct result of the national project. A special committee was assembled at The Center in October, 1965, to categorize the job titles into logical instructional areas. This committee consisted of the following individuals.

Mr. Linwood K. Bailey, Staff Assistant - Manpower, PPA Division, U. S. Department of Agriculture

Mr. R. A. Baker, Assistant Professor of Vocational, Technical, and Practical Arts Education, Auburn University, Alabama

Dr. Norman K. Hoover, Associate Professor of Agricultural Education, Pennsylvania State University

Mr. Herbert D. Brum, Assistant State Supervisor of Agricultural Education, Ohio

Dr. Carroll L. Shartle, Director, Division of Research, The Ohio State University

Dr. Glenn Z. Stevens, Professor of Agricultural Education, Pennsylvania State University

Mr. William Stevenson, Research Specialist in Vocational Education, Oklahoma State University

Mr. Emanuel Weinstein, Occupational Analyst, Ancillary Services Section, Division of Vocational and Technical Education, U. S. Office of Education

Subsequent association of several of the committee members with other national committees and in consultation with Mr. Neville Hunsicker, Chief, Agricultural Education, U. S. Office of Education, resulted in the following major instructional area categories:

1. Agricultural Production
2. Agricultural Mechanics
3. Agricultural Supplies
4. Agricultural Products
5. Agricultural Resources
6. Forestry
7. Ornamental Horticulture
8. Other Agriculture

Special group work under the direction of Dr. Glenn Z. Stevens, Pennsylvania State University, and Dr. James W. Hensel, Center staff, was completed to match major agricultural occupations identified in the state studies with the definitions in the Dictionary of Occupational Titles and with the structure of the Standard Industrial Classification.

The final report of this contract has been submitted to the Office of Education.

Follow-up Activities:

Minor changes in the materials will be made in the form of an addendum to be attached to each of the course outlines following the evaluation at the national seminar.

Work will continue concerning the instructional areas in off-farm agricultural occupations in terms of a new project. New projects will be designed to determine the effectiveness of the materials and to adapt the materials to the individual student.

6. A National Interdisciplinary Seminar on Guidance for Vocational Education: Guidelines for Research and Practice, January 12-14, 1966

Purpose:

The major purpose of the seminar was to provide an opportunity for leaders in vocational education, guidance, and related disciplines, to pool their resources and thinking in formulating plans for initiating and improving programs of research and practice.

Objectives:

1. To stimulate interdisciplinary research and interest;
2. To evaluate the states of the field and to identify specific problem areas;
3. To assist educators and administrators in establishing policy and program guidelines;
4. To coordinate and exchange information among the relevant disciplines;
5. To project long-range needs and goals;
6. To reduce the time lag between research, theory, and practice.

Clientele Served:

There were 198 participants from 39 states and the District of Columbia. Included were:

State and district directors of vocational education
State and district directors of counseling and guidance
Sociologists
Psychologists
Labor economists

Researchers
Guidance counselors
General educators
Rehabilitation specialists
Teacher educators
Counselor educators

Consultants:

Following are the consultants used during the seminar:

Dr. Roy N. Anderson, Head, Department of Occupational Information and Guidance, North Carolina State University

Dr. Walter M. Arnold, Assistant Commissioner, Vocational and Technical Education, U. S. Office of Education

Dr. Henry Borow, Professor of Psychological Studies, University of Minnesota

Dr. Dolph Camp, Chief, Occupational and Career Guidance Section, U. S. Office of Education

Dr. John F. Cogswell, Research Leader, System Development Corporation, Santa Monica, California

Dr. Ronald G. Corwin, Associate Professor of Sociology, The Ohio State University

Dr. John O. Crites, Associate Professor of Psychology, Director of the Counseling Center, The University of Iowa

Mr. J. Edward Dickerson, Manager, Cleveland Youth Opportunity Center, Ohio

Mr. William R. Drury, Director of Pupil Personnel, Beavercreek Schools, Xenia, Ohio

Dr. William M. Eshelman, Chief, Division of State Program Administration, Department of Health, Education, Welfare

Dr. Frank M. Fletcher, Professor of Psychology, The Ohio State University

Dr. Edward Gross, Professor of Sociology, University of Washington

Dr. Kenneth B. Hoyt, Professor of Education, State University of Iowa

Dr. G. Truman Hunter, Program Administrator, Education, International Business Machines, White Plains, New York

Dr. William B. Logan, Professor of Distributive Education, The Ohio State University

Mr. Louis A. McElroy, Administration Director, Adult and Vocational Education, City of Gary Schools, Indiana

Dr. Duane M. Nielsen, Director, Educational Resources and Development Branch, U. S. Office of Education

Dr. Herbert S. Parnes, Professor of Economics, The Ohio State University

Dr. Otto Pragan, Assistant Director, Department of Education, AFL-CIO, Washington, D. C.

Dr. Howard Rosen, Assistant Director of Research, Office of Manpower, Automation and Training, U. S. Department of Labor

Dr. Walter W. Seifert, Associate Professor, Public Relations, The Ohio State University

Dr. Carroll L. Shartle, Assistant Dean, Commerce and Administration, and Professor of Psychology, The Ohio State University

Dr. Byrl R. Shoemaker, State Director of Vocational Education, Ohio

Dr. Abraham Stahler, Chief, Division of Program Evaluation, U. S. Department of Labor

Dr. Ralph M. Stogdill, Professor of Business Research, The Ohio State University

Dr. W. Wesley Tennyson, Associate Professor of Educational Psychology, University of Minnesota

Dr. Shailer Thomas, Assistant Professor of Sociology and Anthropology, The Ohio State University

Dr. David V. Tiedeman, Professor of Education, Harvard University

Dr. John C. Weaver, Vice President for Academic Affairs, and Dean of Faculties, The Ohio State University

Accomplishments:

Although it is difficult to assess the national ripple effect of this meeting and the magnitude of its immediate and potential impact at this point, there has been tangible evidence as cited below:

1. Published report of the seminar: The first run of 1000 copies was disseminated to consultants and participants, state directors of guidance and vocational education, key researchers and counselor leaders, libraries, the U. S. Office of Education, and other interested persons.
2. Journal articles: Informally, approximately 10 journals, ranging from sociology to guidance, plan to publish various presentations made during the seminar. This additional dissemination will compound the impact of the meeting.
3. Generation of national activities: As a result of a follow-up questionnaire to the participants and consultants, 50 to 75 persons have independently indicated that they will be conducting research and/or workshop activities in their respective areas (e.g., "development of a pilot program to get counselors into every secondary school of this state"; "developing workshops on vocational guidance and vocational education for school counselors"; and "survey of local industries for occupational information"). Many others have similarly indicated plans for activities in the future.
4. Leadership development: Questionnaire responses indicated leadership growth in terms of knowledge and competency for future administration of guidance practice and research in vocational education on the part of the participants.

Follow-up Activities:

Activities fall in three categories, based on a follow-up questionnaire as described below:

1. Activities suggested to be sponsored by The Center and/or other groups:
   a. A clearinghouse of guidance innovations, research, and demonstration programs, similar to The Center's ERIC function;
   b. A series of smaller conferences on specific problems;
   c. Research activities.
2. Activities initiated by individual participants at their respective institutions.
3. Activities initiated by The Center:
   a. A national survey of guidance in vocational education;
   b. A research exchange conference on the use of computers and man machine models is counseling, occupational information, and vocational choice;
   c. Research on the vocational choice process of students with special needs (i.e., perceived obstacles to choice, the meaning of choice, and the significance of work).

7. National Vocational-Technical Education Seminar on the Development and Coordination of Research by State Research Coordinating Units, January 31-February 4, 1966 (subcontract with Cornell University)

Purpose:

The major purpose of this seminar was to assist research coordinating unit personnel and other educational leaders in fulfilling their roles in planning and conducting comprehensive state programs of research and development in vocational education.

Objectives:

1. To develop a concept of research and development for state programs of vocational education and the conditions essential to its implementation and success;
2. To develop an understanding of a functional organizational structure for establishing and administering a program of research and development in vocational education;
3. To identify key individual and organizational roles and clarify their relationships to research and development activities;
4. To develop an understanding of the dynamics of planned change through research and its application to vocational education;
5. To stimulate empathy and support for research and development activities in vocational education;

6. To establish lines of communication for coordinating state, regional and national research and development activities in vocational education;
7. To provide a setting where individuals can share ideas and seek solutions to common operational problems in vocational education research and development activities.

Clientele Served:

A pre-enrollment limit of 60 participants had been set; however, 62 participants from 42 states, Puerto Rico, and the Virgin Islands attended the seminar. Representation was as follows:

18	representing colleges, universities, and training institutions
42	representing state departments of education
2	representing the U. S. Office of Education

All of the 24 initially approved and funded state research coordinating units were represented.

Consultants:

Mr. David Bushnell, Director, Division of Adult and Vocational Research, U. S. Office of Education

Dr. David L. Clark, Professor of Education, The Ohio State University

Dr. Desmond Cook, Professor of Education, The Ohio State University

Dr. John Coster, Director of Research Coordinating Unit, University of Nebraska

Dr. Egon Guba, Professor of Education, The Ohio State University

Dr. Harold Haswell, Director of ERIC, U. S. Office of Education

Dr. Ray Jongeward, State Director of Research, Washington

Dr. Loyal Joos, Director of Systematic Studies, Oakland Schools, Pontiac, Michigan

Dr. Alan Knox, Professor of Education, Columbia University

Dr. H. F. Lionberger, Chairman, Department of Rural Sociology, University of Missouri

Dr. William B. Logan, Professor of Distributive Education, The Ohio State University

Mr. Bernard Michael, Program Evaluation Office, U. S. Office of Education

Mr. Michael Munger, Data Processing Specialist, University of Nebraska

Dr. Alan Robertson, Chief, Bureau of Research and Evaluation, State Department of Education, New York

Dr. Gordon Swanson, Professor and Coordinator, International Programs, University of Minnesota

Dr. Robert M. Worthington, Assistant Commissioner of Education, New Jersey

Accomplishments:

Twenty-six of the participants requested a follow-up conference on PERT (Program Evaluation Review Technique), a topic on the conference program. Twenty states have recently submitted applications to the U. S. Office of Education requesting funds for establishing state research coordinating units; thirteen of these had representation at the seminar. A Directory of Research Coordinating Unit Personnel was assembled, printed, and distributed to the seminar participants.

Follow-up Activities:

A 1967 seminar with emphasis on research management is planned as the next in a series following the May, 1965, Conference on Research Administration, and the January, 1966, Seminar on Research Coordination. It is expected that the directors of the state research coordinating units will be a prime target group.

8. National Research Planning
Conference for Business
and Office Education,
February 27 - March 2, 1966

Purpose:

The central purpose of this Conference was to stimulate interinstitutional research on priority problems in business and office education.

Objectives:

1. To define major blocks of research for business and office education;
2. To establish priorities in research for business and office education;
3. To establish working relationships with a number of universities in cooperative and coordinated research.

Clientele Served:

Thirty university and college researchers from seventeen states and Canada attended.

Consultants:

Mr. Gerald F. Carney, General Services Department, J. C. Penney Company, New York, New York

Mr. Joseph Gawthrop, Pilot Life Insurance Company, Greensboro, North Carolina (Past President, Administrative Management Society)

Dr. Charles B. Hicks, College of Commerce and Administration, The Ohio State University

Dr. Mildred Hillestad, Business Education, University of Colorado

Dr. C. L. Littlefield, Chairman, Department of Management, North Texas State University

Mr. Belden Menkus, Kennecott Copper Corporation, New York, New York

Dr. Irene Place, School of Business Administration, The University of Michigan

Mr. J. A. Ramsen, International Business Machines, Chicago, Illinois

Mrs. L. H. Southmayd, Data Communications Planning Manager, Marketing Department, American Telephone and Telegraph Company, New York, New York

Accomplishments:

1. A synthesis of the research planning conference was developed with the aid of two of the consultants and has been published.
2. Five major research areas were identified, two of which were classified as priority items.
3. The first priority research area concerning office occupations education for the disadvantaged is now being developed as a research project cooperatively with the staffs of Hunter College and New York University.
4. The second priority research area concerning information handling and management is now being developed and holds the interest of several universities as a possible cooperative effort.

Follow-up Activities:

Other research areas not developed at this time will be studied with a view to their later development. Continued communication with leaders in business and office occupations education will be maintained regarding The Center's continued role in this area.

The Research Planning Conference for Providing Business and Office Education to Disadvantaged Youth held in May, 1966, was an outgrowth of this meeting.

9. National Seminar on Occupational Education in Home Economics, March 28-31, 1966, and Post Seminar Meeting: "Implications for Research," March 31-April 1, 1966.

Purpose:

The central focus of this effort was to provide state leaders in home economics education with an opportunity to gain greater understanding of and insight into wage-earning education, and specific state leadership procedures in program development.

Objectives:

1. To provide and develop an understanding of the changing society and its implications for home economics for gainful employment, particularly with reference to the leadership roles of state supervisors and teacher educators;
2. To acquaint educators with methods and techniques for bringing about change in educational programs;
3. To develop an understanding of the resources provided through recent legislation--resources which will help strengthen occupational education programs;
4. To provide an opportunity to (a) explore the many facets involved in developing and administering occupational education programs at the high school, post-high school, and adult levels; and (b) identify some methods and techniques which may be used in their development;
5. To determine the personnel and materials needed and available for use in the development of programs;

6. To identify needed research and experimental programs;
7. To determine ways that research findings and pilot programs can provide tested information and ideas for program development and improvement.

Clientele Served:

One hundred fifty individuals from 41 states, the District of Columbia, and Puerto Rico attended the seminar, with 140 supported by other than Center funds. Representation was as follows:

76 home economics educators on college and university staffs
30 home economics state supervisory staff members
34 home economics city supervisors
7 resource people
3 home economists on the U. S. Office of Education staff

Consultants:

Miss Dorothy Lawson, Seminar Coordinator, formerly Chief of the Bureau of Home Economics, State Department of Education, New York

Planning Committee:

Mrs. Carolyn G. Brown, Assistant State Supervisor of Home Economics Education, Alabama

Mrs. Ethelwyn Cornelius, Supervisor of Home Economics Education, Ithaca, New York

Dr. Marie Dirks, Head, Home Economics Education, The Ohio State University

Dr. Berenice Mallory, Chief, Home Economics Unit, Occupations Section, Division of Vocational and Technical Education, U. S. Office of Education

Miss Margaret McEniry, Head State Supervisor of Home Economics Education, Ohio

Dr. Elizabeth J. Simpson, Chairman, Home Economics Education, University of Illinois

Miss Mary Lois Williamson, State Director of Home Economics Education, Kentucky

Seminar Program Consultants:

Dr. H. M. Brickell, Assistant Superintendent, Manhasset High School, New York

Dr. Lawrence Borosage, Project Director, College of Education, Michigan State University

Dr. Alberta Hill, Associate Professor of Home Economics Education, Iowa State University

Dr. M. G. Linson, Assistant Director of Vocational Education, Colorado

Dr. Elizabeth J. Simpson, Chairman, Home Economics Education, University of Illinois

Dr. Berenice Mallory, Chief, Home Economics Unit, Occupations Section, Division of Vocational and Technical Education, U. S. Office of Education

Dr. Rose Terlin, Chief of Economics Status and Opportunity Division, Woman's Division, U. S. Department of Labor

Accomplishments:

Responses on the evaluation sheet completed at the time of the meeting indicated the leaders attending the meeting believed it valuable and worthwhile. A display of resource material provided participants an opportunity to become acquainted with available materials.

A report, including the major presentations and summary of group discussion, was sent to those in attendance and to other state supervisors and teacher educators.

Participants attending the seminar identified ways The Center could provide leadership in developing and strengthening programs in home economics education. These were:

> Assuming a coordinating function in bringing together groups of leaders who desire to explore a phase of occupational education in depth and work cooperatively on curriculum and research projects;

Disseminating information regarding projects, pilot programs, and curriculum material;

Sponsoring additional leadership development seminars in home economics education.

Implications for research in home economics education were considered at a post seminar meeting. Those participating were:

Dr. June Cozine, Head of Home Economics Education, Oklahoma State University

Dr. Marjorie East, Head of Home Economics Education, Pennsylvania State University

Dr. Patricia Tripple, Professor of Home Economics Education, University of Nevada, and Chairman of the Home Economics Education section of AHEA

A broad framework for research in employment-oriented home economics education was identified. From this framework it should be possible to refine a number of research projects. The amount of time allowed for the post seminar meeting was not adequate to get to the design stage, however, the meeting was helpful as a first step in identifying priority research areas. The proposed projects, "Implication of Women's Work Expectation Patterns for Program Development in Vocational Education" and "The Development of Curriculum Models for High School Home Economics Wage-Earning Programs," grew out of this meeting. It is anticipated that further research projects which will involve other institutions will also be developed.

Follow-up Activities:

Consideration is being given to curriculum development and pilot programs to test the effectiveness of various ways of organizing home economics wage-earning education, including provision of work experience and pre-service and in-service teacher education for the wage-earning emphasis.

10. National Invitational Research Planning Conference on Trade and Industrial Teacher Education - May 23-27, 1966

Purpose:

The purpose of the conference was to stimulate interest and joint state and institutional efforts in trade and industrial teacher education research and development.

Objectives:

1. To review the present status of trade and industrial teacher education programs;
2. To develop guidelines for research and other action programs for improving and expanding the field of trade and industrial education.

Clientele Served:

The invitational conference was planned with the thought that its ultimate accomplishments would provide benefits to all trade and industrial teacher education personnel in the nation. The following fourteen trade and industrial educators, recognized for their research interests and professional leadership, were invited to participate:

Dr. David Allen, Supervisor of Trade and Technical Teacher Education, University of California

Dr. Melvin L. Barlow, Director of Vocational Education, University of California

Dr. Carl R. Bartel, Head of Industrial and Technical Education, Utah State University

Mr. O. H. Beaty, State Supervisor of Trade and Industrial Education, Iowa

Dr. George L. Brandon, Director of Vocational Teacher Education, Pennsylvania State University

Dr. James R. D. Eddy, Dean, Division of Extension, The University of Texas

Dr. Edward K. Hankin, Professor of Vocational Education, Florida State University

Dr. Durwin M. Hanson, Professor and Head of Industrial Education, North Carolina State University

Dr. L. C. McDowell, Head of Trade and Industrial Education, University of Kentucky

Dr. Gordon G. McMahon, Director of Vocational-Technical Education, State University College, Oswego, New York

Dr. Howard Nelson, Head of Trade and Industrial Education, University of Minnesota

Dr. John O'Brian, Associate Professor of Vocational-Technical Education, Rutgers - The State University

Dr. Joe L. Reed, Director of Trade and Industrial Education, University of Tennessee

Dr. Robert M. Reese, Director of Trade and Industrial Services, The Ohio State University

Consultants:

The following individuals served as consultants during the conferences:

Dr. Dwight Allen, Professor and Director of Secondary Education Program, Stanford University

Dr. Lawrence Braaten, Research Specialist, Education Resources Development Branch, Division of Adult and Vocational Research, Bureau of Research, U. S. Office of Education

Dr. Alexander Ducat, Specialist, Technical Education Unit, Division of Vocational and Technical Education, U. S. Office of Education

Mr. James Peterman, Educational Advisor, Service School Command, U. S. Naval Training Center, Great Lakes

Dr. Merle E. Strong, Assistant Director, Program Services Branch, Division of Vocational and Technical Education, U. S. Office of Education

Accomplishments:

The research, professional literature, and new programs and practices for trade and industrial teacher education were reviewed, and lists of guiding principles, priority research, and other action programs were developed.

Follow-up Activities:

The follow-up activities planned for this conference consist of:

1. The preparation of a conference report;
2. The preparation of guiding principles for the development and expansion of trade and industrial teacher education;
3. A planning meeting to explore the development of materials to fill identified voids in the professional literature;
4. A planning meeting to design a proposal for priority research in this area.

11. National Seminar on Evaluation and
Program Planning in Agricultural
Education, June 27-30, 1966
(Supported by Sears-Roebuck Foundation)

Purpose:

The major purpose of the seminar was to provide an opportunity for state leaders in vocational agriculture and representatives of related vocational services to develop plans and essential competencies for effective evaluation of pilot programs in off-farm agricultural education.

Objectives:

1. To evaluate pilot programs in off-farm agricultural occupations;
2. To appraise and refine course outlines and teaching modules developed by The Center staff;
3. To plan comprehensive and continuing programs of effective measurement and evaluation;
4. To develop effective evaluation techniques at the high school and post-high school levels in conjunction with program planning procedures;
5. To formulate dissemination procedures for off-farm agricultural programs.

Clientele Served:

The participants included 61 state supervisors and teacher trainers in agricultural education representing 36 states and Puerto Rico.

Consultants:

Major contributions were made by two U. S. Office of Education staff members and other leading educators from across the nation. The consultants were:

Mr. John Adams, Jr., Vocational Agricultural Supervisor, Kentucky

Mr. Dale C. Aebischer, Chief, Agricultural Education - Rural Division, Wisconsin

Dr. Ray Agan, Head of Agricultural Education, Kansas State University

Dr. Harold Anderson, Assistant Supervisor of Agricultural Education, Ohio

Dr. William H. Annis, Head of Agricultural Education, University of New Hampshire

Mr. William J. Becker, Teacher of Vocational Agriculture, Janesville, Wisconsin

Dr. V. Ray Cardozier, Professor and Head of Agricultural and Extension Education, University of Maryland

Mr. G. R. Cochran, State Supervisor of Agricultural Education, Minnesota

Dr. George Ekstrom, Professor of Agricultural Education, University of Missouri

Mr. T. L. Faulker, State Supervisor of Vocational Agriculture Education, Alabama

Dr. Jerry Halterman, Dean of Agriculture, Chico State College, California

Dr. William L. Hull, Assistant Professor of Agricultural Education, Oklahoma State University

Mr. Neville Hunsicker, Chief, Agricultural Occupations Division, Bureau of Vocational-Technical Education, U. S. Office of Education

Dr. Alan Kahler, Assistant Professor of Agricultural Education, University of Nebraska

Mr. Leonard Kunzman, State Supervisor of Agricultural Education, Oregon

Dr. C. Oscar Loreen, Teacher Educator and Supervisor of Agricultural Education, Washington State University

Dr. George Luster, Teacher Educator of Agricultural Education, University of Kentucky

Dr. W. Howard Martin, Associate Professor of Education, University of Connecticut

Mr. Bernard Michael, Program Evaluation Specialist, U. S. Office of Education

Dr. Frank Pearce, Director of Research, Modesto Junior College, California

Dr. Paul Sweany, Professor of Agricultural Education, Michigan State University

Mr. Sid Sutherland, Emeritus Professor of Agricultural Education, University of California at Davis

Dr. David Shontz, Head of Agricultural Education, University of Rhode Island

Mr. James Utzinger, Horticulture Teacher, Pleasant View High School, Grove City, Ohio

Dr. Ralph Woodin, Professor of Agricultural Education, The Ohio State University

Accomplishments:

The seminar provided the foundation for state leaders as they begin the task of evaluating local and state programs of vocational agriculture. Plans and proposed activities generated during the seminar should contribute to state leadership effectiveness in assisting with the national evaluation of vocational education.

Follow-up Activities:

A seminar report was sent to each participant, teacher-education department, and head state supervisor in agriculture.

12. National Seminar on Health Occupations Education Centers, Chicago, Illinois, July 11-14, 1966

Purpose:

The seminar was planned to provide an opportunity for vocational educators, representatives of the health professions, and employers of workers in health services to explore and develop a better understanding of the health occupations education centers and their responsibilities in organizing and administering such centers.

Objectives:

1. To assist state leadership personnel in developing requisite skills in the further development of health occupations education;
2. To facilitate cooperation and interagency assistance in accelerating program improvement and development in this area;
3. To develop greater understanding concerning the implications of organizing and administering health occupations education centers.

Clientele Served:

Despite a national strike by five major air lines, 133 persons from 33 states participated. Participants included state vocational education supervisory personnel in health occupations, U. S. Office of Education specialists, representatives of the health profession, representatives of other related agencies and organizations and employers of workers in health services.

Consultants:

A wide range of consultants was used in both the planning and execution of this seminar. Following are the members of the national seminar planning committee who met with the seminar coordinator to plan the program:

Mr. Russell Frazee, Health Research Project, Pittsburgh, Pennsylvania

Miss Elizabeth Kerr, State Consultant for Health Occupations Education, Iowa

Mr. Arch Lugenbeel, Project Director, South Carolina Hospital Association, Columbia

Mrs. Celeste Mercer, State Consultant for Health Occupations, California

Miss Helen Powers, Chief, Health Occupations Unit, Bureau of Adult and Vocational Education, U. S. Office of Education

Mr. Joseph Rhea, Executive Director, Health Careers, Health Council of Illinois, Chicago

Mrs. Frances Glee Saunders, Field Representative, Health Occupations, Division of Vocational and Technical Education, U. S. Office of Education, Chicago, Illinois

Dr. Philip Seagren, Director, Vocational Adult Education, Lindsey Hopkins Education Center, Miami, Florida

Dr. Byrl Shoemaker, State Director of Vocational Education, Ohio

Mr. Kenneth G. Skaggs, Staff Specialist, American Association of Junior Colleges, Washington, D. C.

Other consultants who appeared on the seminar program and made major presentations included:

Dr. William Stewart, Surgeon General, United States Public Health Services

Dr. Grant Venn, Associate Commissioner, Bureau of Adult and Vocational Education, U. S. Office of Education

Mr. Walter J. Markham, Director, State Bureau of Vocational and Technical Education, Massachusetts

Mr. Kenneth E. Vordenberg, Supervisor Secondary Schools, Cincinnati, Ohio

Dr. Robert C. Hardin, Dean, Vice-President, Medical Services, University of Iowa

Mrs. Teresina Thompson, Assistant Director, Springfield Trade High School and Technical Institute, Massachusetts

Mr. Norman Mitby, Director, Madison Vocational Technical and Adult Schools, Wisconsin

Mr. William Lentz, Health Research Project, Pittsburgh, Pennsylvania

Dr. Arthur P. Long, State Commissioner of Public Health, Iowa

Sister Ann Joachim, President, St. Mary's Junior College, Minneapolis, Minnesota

Dr. R. William Graham, Director, Forest Park Community College, St. Louis, Missouri

Mr. Martin A. Paley, Executive Director, Bay Area Health Facilities Planning Association, San Francisco, California

Dr. Robert Tomlinson, Director, Practical Nursing Study, University of Illinois and University of Iowa

Miss Lois A. Jarnagim, R. N. Research Associate, University of Illinois

Mr. Warren N. Swzuki, Research Associate, University of Illinois

Mr. Forbes W. Polliard, Executive Director, Indianapolis Hospital Development Association, Indiana

Mrs. Orieanna Syphax, Supervisor, Health Occupations, State Vocational Service Branch, Bureau of Vocational and Technical Education, U. S. Office of Education

Miss Grace Nangle, State Supervisor of Health Occupations, Massachusetts State Department of Education, was granted leave by that state to be employed by The Center to provide leadership and coordination for this seminar.

Accomplishments:

A seminar report, including the presentation of major seminar consultants and discussion groups, is being prepared. Research and development priorities growing out of the meeting are being considered and recommendations for Center leadership in follow-up activities are being studied.

Follow-up Activities:

The seminar report, discussion session minutes, and feedback from participants are being considered in terms of additional follow-up activities by The Center. It is anticipated that as soon as the position in health occupations on The Center staff has been filled additional follow-up activities will be generated.

13. Meetings of Planning Committees for Center Efforts in the Evaluation of State Programs of Vocational and Technical Education, October 27-28, 1965, and June 17-18, 1966

Purpose:

The major focus of these efforts was to involve a cross section of specialists who could assist The Center staff and consultants in developing plans for a comprehensive state program evaluation model which might serve as a guideline for states in making an assessment and appraisal of their total vocational-technical education efforts.

Objectives:

1. To establish general procedures for designing and developing an evaluation model having utility for state programs of vocational and technical education;
2. To identify the broad categories of evaluation criteria or critical indicators most significant to state programs evaluation;
3. To develop preliminary plans for testing the model in pilot states;
4. To lay plans for training conferences where state personnel could be acquainted with the evaluation model and its use;
5. To establish linkage with other evaluation efforts to achieve maximum cooperation and coordination.

Clientele Served:

The materials and programs evolving from the project are concerned with and planned for use by all states and territories on a voluntary basis.

Consultants:

Resource persons at the October 27-28, 1965, meeting were:

Dr. H. M. Hamlin, Project Director, Criteria and Procedures for Evaluation of Occupational Education, North Carolina State University

Dr. Harry G. Beard, Associate Professor of Education, North Carolina State University

Mr. Bernard Michael, Program Evaluation Officer, Division of Vocational and Technical Education, U. S. Office of Education

Dr. M. D. Mobley, Executive Secretary, American Vocational Association

Dr. Kimball Wiles, Dean, College of Education, University of Florida

Dr. Ronald G. Corwin, Associate Professor of Sociology, The Ohio State University

Dr. J. Chester Swanson, Professor of Education, University of California, Berkeley

Dr. William Logan, Professor of Distributive Education, The Ohio State University

Dr. Rupert Evans, Dean, School of Education, University of Illinois

Dr. Willis E. Ray, Professor of Education, The Ohio State University

Dr. H. Paul Sweany, Professor of Education, Michigan State University

Mr. S. S. Sutherland, Consultant-Professor Emeritus of Agricultural Education, University of California, Davis

Resource persons at the June 17-18, 1966, meeting were:

Mr. Bernard Michael, Program Evaluation Officer, Division of Vocational and Technical Education, U. S. Office of Education

Mr. Ernest Kramer, Assistant Superintendent of Public Instruction, Washington

Dr. Byrl Shoemaker, State Director of Vocational Education, Ohio

Dr. Herbert Righthand, Chief, Bureau of Vocational Education, Connecticut

Dr. Alan Robertson, Chief, Bureau of Research and Evaluation in Occupational Education, New York

Dr. Marvin Linson, State Director of Vocational Education, Colorado

Dr. Harold Anderson, State Director of Research, Colorado

Dr. Carl Lamar, Director of Research Coordinating Unit, State Department of Education, Kentucky

Dr. L. C. McDowell, Teacher Educator of Trade and Industrial Education, University of Kentucky

Dr. Robert Worthington, State Director of Vocational Education, New Jersey

Dr. Morton Marqules, State Director, Introduction to Vocations, New Jersey

Dr. Harold Starr, State Director of Vocational Program Evaluation, New Jersey

Dr. Ronald Koble, Research Consultant, State Department of Education, New Jersey

Several members of the two ad hoc committees will serve in an advisory capacity for The Center's long-range effort in state program evaluation.

Accomplishments:

A design for developing a model evaluation program evolved from the meetings. Three pilot states (Colorado, Kentucky, North Carolina, and New Jersey) were identified and cooperative arrangements completed. Preliminary plans were made for procedures to be followed in conducting training programs for state personnel responsible for program evaluation.

Follow-up Activities:

The Center has undertaken a major continuing effort in developing, refining, and testing a set of guidelines designed to serve as a model for state self-evaluation programs.

14. Leadership Development in Technical Education Planning Conference, November 15 and 16, 1965

Purpose:

The purpose of this conference was to bring together national leaders in the field of technical education to plan the program for five two-week summer institutes to develop leadership in technical education. The planning conference resulted from earlier meetings at The Center in June and August, 1965, concerning research and development needs in technical education. At those meetings, representatives from the U. S. Office of Education, the American Technical Education Association, and The Center concluded that the first efforts in technical education should be a series of two-week leadership development institutes. In addition to serving the leadership development need, the establishment of working relationships with cooperating institutions through the institutes was regarded as also having a potential yield for future research efforts in technical education.

Objectives:

1. To determine the content and structure of the two-week institutes;
2. To determine personnel and budgeting needs of the project;
3. To determine the participant selection criteria and the methods of evaluation and follow-up for the project.

Clientele Served:

The conference participants were:

Mr. H. L. Benson, Professor and Head of Vocational Education,
Colorado State University

Mr. R. O. Brinkman, Superintendent, Joint Vocational School
District, Springfield, Ohio

Mr. J. K. Doss, Head Teacher-Trainer of Trade and Technical Education, University of Georgia

Dr. L. A. Emerson, Professor Emeritus of Industrial and Labor Relations, Cornell University

Dr. M. R. Karnes, Chairman of Vocational and Technical Education, University of Illinois

Mr. R. M. Knoebel, Acting Assistant Director, State Vocational Service Branch, Division of Vocational and Technical Education, U. S. Office of Education

Mr. T. A. Koschler, Vice-President, Miami-Dade Junior College, Miami, Florida

Dr. M. E. Larson, Advisor, Department of Vocational and Technical Education, Rutgers - The State University

Dr. J. T. Nerden, Professor of Industrial Education, North Carolina State University

Dr. Maurice W. Roney, Director, School of Industrial Education, Oklahoma State University

Dr. J. E. Shenton, President, Erie County Technical Institute, Buffalo, New York

Dr. E. R. Towers, Professor of Industrial Arts Education, The Ohio State University

Dr. Ralph C. Wenrich, Professor of Vocational Education and Practical Arts, University of Michigan

Accomplishments:

The major accomplishments of the conference follow.

1. The information essential to complete the planning and development of five two-week leadership development institutes in technical education was assembled.
2. The cooperation of five universities to conduct the planned institutes was secured. (University of Illinois, Rutgers - The State University, Colorado State University, University of Florida, and Oklahoma State University)

3. The conference generated ideas and materials which were important contributions to the preparation of a proposal for funds to conduct the institutes.

Follow-up Activities:

The project planned was funded by Grant No. OEG 3-6-061888-0722 from the U. S. Office of Education and is reported in the following section. Five institutes were conducted during the period June 6 to July 22, 1966.

15. National Leadership Development Institutes in Technical Education, April 20, 1966 to February 20, 1967
(Funded by OE Grant No. 3-6-061888-0722)

Purpose:

The immediate purpose of the project was to conduct five two-week leadership development institutes at five geographically dispersed institutions to help meet the national need for administrative personnel in technical education. The project was planned as a consortium with The Center serving as the coordinating institution. The Center was responsible for the preparation of the proposal for funding, the program planning, the development of instructional materials, and the organization and administration of the evaluation of the project.

Objectives:

1. To provide a means for present and prospective leaders to develop and improve their understanding of administrative leadership in technical education;
2. To stimulate and strengthen the long-range interests of institutions of higher learning in the area of curricula, instructional materials, research, and leadership development activities in technical education;
3. To evaluate the effectiveness of a two-week institute as a vehicle for accelerating the development of leadership for technical education;
4. To assess the effectiveness of a consortium approach to coordinated effort for planning, conducting and evaluating the institutes.

Clientele Served:

The 200 participants were state supervisory personnel, teacher educators, presidents, deans, directors, supervisors, coordinators, department heads concerned with administering programs of technical education, and technical teachers who were recommended as potential for leadership positions. More than 400 applications were received, but only 200 persons were admitted because of budgeting and other limitations of the institutes.

The institutes were conducted by:

Cooperating Institutions and Dates	Directors and Associate Directors
University of Florida June 6-17, 1966	Dr. E. L. Kurth Dr. Fred Thornton
Colorado State University July 11-22, 1966	Mr. H. L. Benson Mr. F. J. Konecny Mr. T. A. Koschler
University of Illinois June 6-17, 1966	Dr. M. Ray Karnes Mr. T. A. Koschler
Oklahoma State University June 6-17, 1966	Dr. Maurice Roney Dr. A. J. Miller
Rutgers - The State University June 6-17, 1966	Dr. M. E. Larson Mr. Angelo Gillie

Each institute made extensive use of leading specialists in technical education and supporting fields in conducting the training sessions.

Consultants:

The following personnel served as general consultants to the total project:

Mr. H. L. Benson, Professor and Head of Vocational Education, Colorado State University

Dr. M. E. Larson, Advisor, Department of Vocational and Technical Education, Rutgers - The State University

Mr. R. O. Brinkman, Superintendent, Joint Vocational School District, Springfield, Ohio

Dr. J. K. Doss, Head Teacher Trainer of Trade and Technical Education, University of Georgia

Dr. L. A. Emerson, Professor Emeritus of Industrial and Labor Relations, Cornell University

Dr. M. Ray Karnes, Chairman of Vocational and Technical Education, University of Illinois

Mr. R. M. Knoebel, Acting Assistant Director, State Vocational Service Branch, Division of Vocational and Technical Education, U. S. Office of Education

Mr. T. A. Koschler, Vice-President, Miami-Dade Junior College, Florida

Dr. J. T. Nerden, Professor of Industrial Education, North Carolina State University

Dr. Maurice W. Roney, Director, School of Industrial Education Oklahoma State University

Dr. J. E. Shenton, President, Erie County Technical Institute, Buffalo, New York

Dr. Byrl Shoemaker, State Director of Vocational Education, Ohio

Dr. E. R. Towers, Professor of Industrial Arts Education, The Ohio State University

Dr. Ralph C. Wenrich, Professor of Vocational Education and Practical Arts, University of Michigan

Accomplishments:

One hundred ninety-five participants from forty-six states completed two weeks of training at the five institutes. A major airline strike concurrent with one of the institutes prohibited achieving maximum participation.

Follow-up Activities:

Analysis of the evaluation data collected through the use of various instruments has revealed that the institutions were highly successful. From all indications the consortium effort which involved six institutions proved of value.

There will be a separate report to the Office of Education on this contract.

A long-range follow-up of participants is planned. A questionnaire will be sent to participants and their superiors by October, 1967, to determine the impact of the institutes after one year.

It is anticipated that additional institutes will be planned for next year.

16. Conference on Instructional Materials Selection for Leadership Development Institutes in Technical Education, March 18, 1966

Purpose:

The primary purpose was to determine the instructional materials needed for the conduct of five national leadership development institutes in technical education. Additional concerns were the design of announcements, participant selection criteria, evaluation procedures, and use of recorder-evaluators.

Objectives:

1. To review a list of suggested instructional material and select the priority items for use in the institutes;
2. To reach agreement on the instructional materials which would be common to all five institutes;
3. To establish invitational and participant selection procedures and techniques for evaluating the institutes.

Clientele Served:

Instructional materials developed and selected as a result of this meeting were prepared to serve the 200 participants in the national leadership development institutes in technical education and the many other persons who will participate in seminars, institutes, and workshops conducted by these leaders.

Consultants:

The persons involved in the meeting were:

Mr. Alexander C. Ducat, Specialist, Technical Education, Division of Adult and Vocational Education, U. S. Office of Education

Dr. Lynn A. Emerson, Professor Emeritus of Industrial and Labor Relations, Cornell University

Dr. M. Ray Karnes, Chairman of Vocational and Technical Education, University of Illinois

Mr. F. J. Konecny, Assistant Director, James Connally Technical Institute, Waco, Texas

Dr. E. L. Kurth, Associate Professor of Education, University Florida

Dr. Milton Larson, Advisor, Department of Vocational and Technical Education, Rutgers - The State University

Dr. Maurice W. Roney, Director, School of Industrial Education, Oklahoma State University

Accomplishments:

An outline of suggested instructional materials was developed, appropriate materials were selected, and plans for preparation of the materials were completed.

Content for the institute announcements was reviewed and revised, criteria for selection of participants and content for the application blanks were discussed, participant procedures and forms were finalized, and evaluation procedures were approved.

Follow-up Activities:

Wall charts, transparencies, publications, and other materials (including a compilation of materials) for each institute participant were prepared or obtained as a result of the planning conference.

17. Comprehensive Research Reviews in Vocational and Technical Education, April 15 - August 15, 1966

Purpose:

The central purpose was to commission recognized scholars in the areas of agricultural education, business and office occupations education, distributive education, home economics education, industrial arts, technical education, and trade and industrial education to prepare, edit, and submit to The Center for Vocational and Technical Education "state of the art" research review papers. The proliferation of knowledge, the expanded research emphasis, and the ever-growing number of publications serving as avenues for reporting research results make it an almost insurmountable task for the professional educator in vocational and technical education to keep abreast of what is reported in the literature. The Educational Research Information Center (ERIC) and decentralized clearinghouses where quantities of materials can be collected, reviewed, and abstracted are currently thought of as one solution to the problem. Since the ERIC system proposes, in the interest of time, to go forth from the present and not to be retrospective, it becomes evident that much of the very significant research completed and reported over the last five years could, if reviewed, digested, and published, serve as an excellent benchmark, a beginning point for the research information retrieval system which is an integral part of The Center's three-fold purpose.

Objectives:

The research review papers:

1. Are oriented primarily for the researcher in each particular field of endeavor.
2. Include guideposts of significant research development and trends.
3. Are a selection and synthesis of the most significant research efforts which indicate position in time, reveal gaps, show trends, and provide a basis for future research and development activities.
4. Reflect major research work which had vocational education as its setting, major focus, and basic interests.
5. Reveal the stage of development of each field, the commonly accepted principles, evolving theories, research benchmarks, and current trends; and to point out both strengths and weaknesses, and give direction for future research efforts.
6. Bring the reader up-to-date through a brief history (five years), including only the most significant or keystone research from earlier periods.

Clientele Served:

The research reviews are oriented primarily toward the research workers in vocational and technical education; however, it is expected that these digests will serve as resource materials for graduate courses, graduate researchers, practitioners, and educators in general.

Consultants:

AREA	WRITER(S)	REVIEWER(S)
Agricultural Education	Dr. Lloyd J. Phipps, Head Dr. Robert Warmbrod, Associate Professor Agricultural Education Department of Vocational and Technical Education University of Illinois	Dr. Gene Love, Associate Professor Agricultural Education Pennsylvania State University
Business & Office Occupations Education	Dr. Frank W. Lanham, Associate Professor Department of Office Occupations Education University of Michigan	Dr. John L. Rowe, Chairman Business Education Department University of North Dakota
Distributive Education	Mr. Warren G. Meyer, Associate Professor Distributive Education College of Education University of Minnesota Dr. William B. Logan Professor and Director Distributive Education The Ohio State University	Dr. Harland Samson, Associate Professor Commerce and Education School of Commerce University of Wisconsin
Home Economics Education	Dr. Hester Chadderdon, Professor Department of Home Economics Education Iowa State College	Dr. Sara Blackwell, Director Teacher Education College of Home Economics Cornell University
Industrial Arts	Dr. Jerry Streichler, Professor Industrial Arts Education Trenton State College	Dr. Jerome Moss, Associate Professor Industrial Education University of Minnesota
Technical Education	Dr. Milton Larson, Advisor Department of Vocational-Technical Education Rutgers, The State University	Dr. Ralph C. Wenrich, Professor and Head Vocational Education and Practical Arts School of Education University of Michigan

AREA	WRITER(S)	REVIEWER(S)
Trade & Industrial Education	Dr. Carl Schaefer, Head Dr. Bruce Tuckman, Associate Professor Department of Vocational-Technical Education Rutgers, The State University	Dr. Melvin Barlow, Director Vocational Education School of Education University of California, Los Angeles

Accomplishments:

Seven distinct research reviews have been prepared; one in each of the areas of vocational-technical education.

Copies of the review papers will be distributed to major libraries and to the Vocational-Technical Education ERIC clearinghouse. These reviews will also assist researchers, practitioners, and educators in a number of areas in rapidly determining the status of research in a given problem area. Such a synthesis will provide a means of acquainting the general reader with the full range of research in vocational education.

Follow-up Activities:

The research reviews resulting from this effort have focused upon seven distinct service areas; future reviews might be prepared so as to cut across service areas, with the primary concern being upon such selected variables as teacher training, facilities, student selection, and curriculum in the total field of vocational education.

18. Research Planning Conference for Providing Business and Office Education to Disadvantaged Youth, May 20-21, 1966

Purpose:

The purpose of this effort was to formulate plans for a major research effort for disadvantaged youth preparing for office occupations.

Objectives:

1. To analyze the problems of disadvantaged youth in preparing for office occupations within which there are expanding employment opportunities;
2. To determine the feasibility of an interinstitutional approach in attacking these problems;
3. To develop a research proposal.

Clientele Served:

The potential clientele of the completed project are teacher-educators and classroom teachers of disadvantaged youth in both metropolitan and economically depressed areas.

Consultants:

Those who attended the planning conference and assisted The Center staff member in planning the activity were:

Dr. Rubelia J. Bailey, Virginia State College, Norfolk

Mrs. Oberita Hager, Graduate Student, Business and Office Education, The Ohio State University

Dr. Estelle Popham, Chairman, Business Education Department, Hunter College of the City University of New York

Dr. J. Marshall Hanna, Chairman, Business Education Department, The Ohio State University

Dr. Herbert A. Tonne, Chairman, Business Education Department, New York University (After September 1, State University of New York at Albany)

Dr. Jack R. Frymier, Professor of Education, The Ohio State University

Dr. Inez R. Wells, Professor of Business Education, The Ohio State University

Accomplishments:

1. A research project was developed.
2. A cooperating university, Hunter College of the City University of New York, will be involved in the projected research.
3. Other universities and colleges adjacent to areas where a large number of disadvantaged youth reside are being approached for participation.

19. Ad Hoc Advisory Meeting on Critical Aspects of The Center Information Retrieval Program (linked with the U. S. Office of Education Educational Research Information Center) March 25-26, 1966

Purpose:

The purpose of this meeting was to secure the counsel of a selected group of vocational and technical education specialists in further developing plans and guidelines for operationalizing the information retrieval program in vocational and technical education. A preplanning conference was held on March 2 with The Center specialist staff and members of The Ohio State University faculty in vocational and technical education. Information obtained formed the basis for this two-day conference with researchers in vocational and technical education.

Objectives:

1. To identify parameters for the scope of activity of the ERIC clearinghouse;
2. To identify materials by types or classes and by form;
3. To identify sources from which to obtain materials;
4. To identify major user groups;
5. To consider criteria for determining input items into the I.R. system.

Consultants:

The following representatives from the AVA Research Committee, Research Coordinating Units, state directors, and local units were brought together to accomplish the objectives.

Dr. Harold Byram, Professor of Agricultural Education, Michigan State University

Dr. B. E. Childers, State Director of Vocational Education, Tennessee

Dr. Harry D. David, Business Education, Indiana University

Dr. Carl F. Lamar, Research Coordinator, Division of Vocational Education, University of Kentucky

Dr. Rutherford E. Lockette, Chairman of Industrial Education, Trenton State College

Dr. William Mason, Director of Technical Education, Cleveland Public Schools

Mr. W. G. Meyer, Associate Professor of Distributive Education, University of Minnesota

Dr. John J. O'Brian, Professor of Vocational-Technical Education, Graduate School of Education, Rutgers - The State University

Dr. Elizabeth Ray, Professor of Home Economics Education, Pennsylvania State University

Dr. T. A. Ryan, Research Coordinating Unit Director, Oregon State University

Mr. C. O. Towers, Director, State Research Coordinating Unit Ohio

Accomplishments:

Information obtained from this conference resulted in an outline of subject areas directly related to information needs of researchers and others in the field of vocational and technical education. Suggestions of sources from which to acquire materials and names of user groups were obtained; however, satisfactory methods to obtain materials need to be developed. Some of the problems of criteria for input were identified. An objective study of "user groups" and their information needs will be developed.

Follow-up Activities:

An advisory committee of vocational and technical education leaders and researchers will be utilized on a continuing basis to advise the Information Retrieval Division.

20. Developing a Model for the Evaluation of State Programs of Vocational and Technical Education

Purpose:

The central purpose of this project is to develop continuing mechanisms for use by states in evaluating their programs of vocational and technical education, mechanisms which are to be in the administrative mainstream and contribute to decision making for state program planning, development, and redirection.

Objectives:

1. To develop and test in four pilot states (New Jersey, Kentucky, North Carolina, and Colorado) a model for evaluating state programs of vocational and technical education;
2. To conduct training conferences for state staff members, utilizing the state model, materials, and experiences derived from the trials in the pilot states;
3. To refine and evolve state program evaluation mechanisms for continuous evaluation.

Procedures:

Because of the complex interrelations implied in the evaluation of state programs of vocational education and other involvements and commitments in this area, and the desire to achieve maximum yield from this project, a number of essential working relationships have been established. To minimize duplication and maximize coordination, continued consultation is maintained with the program evaluation personnel in the Division of Adult and Vocational Education, U. S. Office of Education.

Arrangements were made with the state directors of vocational education in New Jersey, Kentucky, North Carolina, and Colorado for the involvement of their state programs as pilot states. These state departments have each employed a full-time evaluation specialist to work with The Center evaluation task force and, consequently, they will have primary roles to play in conducting the pilot evaluation in their respective states. Continuous contact is maintained with evaluation efforts in the North Carolina Center; with the "Leadership Role, Function, Procedures, and Administration of Vocational-Technical Education Agencies at the State Level" project at the University of California, Berkeley; and with other evaluation efforts.

Initial efforts focus on the further conceptualization and refinement of a model for evaluating state programs of vocational education, devoting particular attention to the identification of "potent variables," "key indicators,"--those critical characteristics of a program that have the greatest implications for program assessment and redirection in terms of educational and economic efficiencies.

Evaluation specialists from the pilot states are involved periodically with the central project staff in making critical judgments and in developing needed materials.

Center project staff members consult with administrative personnel in the pilot states to determine the feasibility of the projected model and procedures. The evaluation model will be tested in the pilot states and, based on these experiences, needed adjustments, refinements, and improvements in the instruments, procedures, and techniques will be made. Attention also will be given to procedures for deriving overall synthesis and summary judgments concerning the total evaluation within the state.

At the earliest possible date, three regional clinics will be planned and conducted to maximize participation by the states. Personnel from the pilot states and the project staff, in cooperation with other appropriate personnel from the U. S. Office of Education and other evaluation efforts, will be involved. During these clinics, state staff personnel will be familiarized with the procedures for applying the tested model for the evaluation of their state programs of vocational and technical education.

Outcomes:

It is anticipated that as a result of this effort considerable activity will be generated which will contribute to the national evaluation effort. Even more important, however, there will evolve a tested model for comprehensive evaluation of vocational education programs, which can become institutionalized within a state administrative and operational structure and provide an efficient, continuing mechanism for evaluation and assessment designed to assist in state program planning and decision making.

21. State Department of Education Leadership in Vocational Education: A Study of Its Current Status, Projected Needs, Evolving Role, and Recommendations for a Training Program

Purpose:

The central purpose of the study is to improve the quality of state department leadership in vocational education. Four primary objectives of the study appear in context with the central purpose. Each represents a separate phase of the investigation.

Objectives:

The four primary objectives are:

1. To depict the current status of vocational education state leadership and project its needs in terms of quantity, experience, and education;
2. To conceptualize the emerging role of the state department of vocational education;
3. To develop training programs to prepare leaders to function effectively in the emerging milieu of the state department of vocational education;
4. To develop simulation and other materials for use in pilot training programs for training leaders for state departments of vocational education.

Phase I

Procedure:

This phase of the project has been a cooperative effort involving The Center for Research and Leadership Development in Vocational and Technical Education at The Ohio State University, the North Carolina State University Center for

Occupational Education, and the University of California at Berkeley. Seventeen consultants representing the three institutions have been involved in this project.

Development of the leadership project began during the latter two weeks in November, 1965. The draft of the project proposal was completed and presented to representatives of the three cooperating institutions at a conference in Raleigh, North Carolina, on December 1, 1965. Further refinement on the document was begun and two conferences were held later.

An instrument consisting of five forms was developed for gathering data.

Form I of the interview was designed to provide insight into the status of personnel policies of the state department of vocational education and their impact upon identifying, acquiring, and retaining leadership personnel.

The purpose of Form II of the interview instrument was to gather data from each division in the state department of vocational education organizational chart pertaining to problems of retaining qualified leadership personnel, effective strategies for retaining them, and changes which the agency heads believe will help retain personnel. A further purpose of this form is to identify people who have left leadership positions in the state department of vocational education. At a later time a questionnaire will be mailed to them to collect data pertaining to their reasons for leaving.

In Form III the questions seek to gather data pertaining to both primary objectives of the study. Questions are asked about each position in each division, and they examine the status of leadership personnel in terms of quantity and quality for 1960 and 1965, with a projection for 1970.

Form IV is designed to gain information from past employees that will help state departments of vocational education develop programs for retaining qualified people who might otherwise leave.

Form V is designed to determine experience and training needs for leadership positions in state departments of vocational education as perceived by vocational leaders in the field, and to describe the training that leaders have had.

The respondents in Phase I are:

1. State directors of vocational education (Forms I, II, III)
2. Heads of the various areas in vocational education in the state division of vocational education (Forms II, III)
3. Field supervisors of vocational education (Form V)
4. Former state division of vocational education staff members who have left the department for other employment (Form IV)

Clearance for the use of the instruments was given in April by the Office of Education. By the end of the contract period, the interviews had been completed in over twenty states and seventy-seven percent of Questionnaire Form V had been returned. Later, Form IV of the instrument will be mailed to persons who have left positions of leadership in state departments of vocational education.

Outcomes:

When the results of this depicting phase of the study, Phase I, are compared with Phase II, "Conceptualizing the Emerging Role of the State Division of Vocational Education," the investigators should be able to determine the gap between what is and what should be in vocational education state leadership education.

Information gained in Phase I of this study will be utilized immediately in the ongoing research and leadership development programs of The Center as implications in the various areas are recognized.

Phase II

Procedures:

The first of the projected activities in Phase II was the commissioning of eight background papers which deal with forces affecting education and implications of these forces for state departments of education. The eight background papers cover the following topics:

1. The Changing Characteristics of the General Population: Implications for Education
   Dr. Philip Hauser
   Chairman and Professor of Sociology
   University of Chicago

2. Obtaining Optimal Education Opportunity for Disadvantaged Groups
   Dr. Robert Hess
   Urban Child Center
   University of Chicago

3. The Changing Occupational Structure with Implications for Education
   Dr. Leonard Lecht
   Director, National Goals Project
   National Planning Association

4. Changing Characteristics of State and National Student Populations
    Dr. Eugene McLoone
    Professor of Economics
    George Washington University

5. The Expanding Federal Role with Implications for State Education Departments
    Dr. Nicholas Masters
    Professor of Political Science
    Pennsylvania State University

6. Emerging Organizational Structures for Facilitating Educational Change with Implications for State Education Departments
    Dr. Francis Ianni
    Director of the Division of Educational Instruction and Programs
    Teachers College, Columbia University

7. State Government and Education
    Dr. Larry Iannaccone
    Professor of Education
    Clarmont Graduate School

8. Emergent Functions of State Departments of Education
    Dr. Ewald B. Nyquist
    Deputy Commissioner of Education
    State Department of Education
    New York

On September 11 and 12 an advisory commission convened to make plans for a conference and to lay a base for developing potential follow-up programs. The commission was composed of national and state leaders interested in the improvement of vocational education, state education department leaders, and university professors and deans.

Members of the advisory commission are:

*Dr. Roald Campbell, Dean, Graduate School of Education, University of Chicago

*Dr. Jack Culbertson, Executive Director, University Council for Educational Administration, The Ohio State University

*Responsible for preparing synthesis papers

*Dr. Gerald James, President, Rockingham Community College, Wentworth, North Carolina (formerly State Director of Vocational Education in North Carolina)

Dr. Donald Anderson, Associate Director, University Council for Educational Administration, The Ohio State University

Dr. Roy Larmee, Professor of Education, The Ohio State University

Dr. Truman Pierce, Dean, School of Education, Auburn University, Alabama

Mr. Richard Rice, Project Director, The Center for Vocational and Technical Education, The Ohio State University

Dr. James A. Sensenbaugh, State Superintendent of Education, Maryland

Dr. Leon Minear, State Superintendent of Education, Oregon

Dr. Byrl R. Shoemaker, State Director of Vocational Education, Ohio

Mr. Wesley Smith, State Director of Vocational Education, California

Dr. Ralph C. Wenrich, Chairman of Vocational and Practical Arts Education, University of Michigan

Dr. Robert E. Taylor, Director of The Center for Vocational and Technical Education, The Ohio State University

*Responsible for preparing synthesis papers

The commission will advise the three persons who have been selected to develop summary and implications papers based upon the eight background papers and to give particular thought to strategies for improving state education department functionings in general and vocational education in particular. The advisory commission will plan an interinstitutional and interdisciplinary conference to be held this winter with fifty persons invited to attend. The writers of the eight background and three synthesis papers will be present at the conference to lead the discussions concerning the ideas they have presented on the emerging role of the state department of education, with specific implications for vocational and technical education. Representation at the conference will include leaders in vocational education, professors from UCEA universities, and leaders from state and federal levels of government.

Outcomes:

A special task force will be instituted during the conference to concentrate upon follow-up action. During the discussion of follow-up activities, some guidelines will be discussed after comparing Phase I of this project and Phase II. Recommendations and priorities for action should be established by the task force.

At the completion of the project, The Center will publish the papers and a summary of this phase of the project.

During the conduct of Phase II and after its completion, implications for ongoing programs and for needed research and development will be identified. A primary outcome of this project will be new research and development programs at the state level in vocational and technical education.

Phase III

Procedure:

A task force will be convened to evaluate and react to the depicting phase, Phase I, and the conceptualizing phase, Phase II, of the project. It is anticipated that the task force will aid in recommending strategies for improving the present state department of vocational education personnel with relation to education and experience to improve their effectiveness in the emerging role of state departments of education.

Other activities of Phase III follow.

1. Scholars from vocational education and the supporting disciplines will be invited to present a statement of pertinent concepts necessary for the training program for leaders in state departments of vocational education who must work in the milieu described in Phase II but who are functioning in a Phase I type situation.
2. A commission of vocational educators and other interested scholars will be convened to carefully study the statements of pertinent concepts and to propose a tentative pre-service program for training state vocational education leadership personnel.
3. Strategies will be formulated for implementing the program developed in the second step.

Phase IV

Procedures:

The task in Phase IV is the development of materials for training state department of vocational education leadership personnel so they may function more effectively in the milieu of the emerging role of the state department of education identified in Phase II of this project.

The first step will be to identify leadership competencies that are needed by state department of vocational education personnel in accord with their emerging role within the state department of vocational education. Based upon these identified competencies simulated and other training materials will be developed and evaluated through pilot programs. The use of materials will be demonstrated and programs initiated for upgrading staff personnel in state departments of vocational education.

Outcomes:

It is anticipated that the project will eventually culminate in a pilot training project for state department of vocational education leaders, involving several universities.

Coordination of Activities with Other Research Efforts

Extensive efforts have been made to coordinate this project with other research and development activities impacting on state vocational education leadership. Nine meetings extending over the past year have been held between project directors and project staff members of The University of California at Berkeley and North Carolina State University. Some of these meetings involved the project officer in the U. S. Office of Education. The objectives and procedures for these efforts differ but are complementary. Discussions have centered around maximizing the potential reinforcement and complementary effort of these projects, joint data collection procedures, interviewer training, and consultation between project personnel. The instruments from The Ohio State University project were the first developed among the three efforts and after clearance by the Office of Education were shared with representatives of the other institutions. Further, the Director of The Center at The Ohio State University is a member of the advisory committee of the Berkeley Project and the North Carolina State Project. Discussions have also been held with state directors of vocational education and the research coordination units to clarify coordinate activities in this area. Definite plans are established for maintaining essential communications and relationships.

22. An Exploratory Investigation of the School Climate as a Variable in Vocational School Dropout Rates

Purpose:

The purpose of this study is to investigate the "school climate" as a correlate of vocational school dropout rates and to develop a model and procedure for schools to use in determining "climate." The school climate is defined as the administrative and student milieu (i.e., both formal and informal rules, procedures, and expectancies) which may have either a positive or negative congruence with the needs of the students.

Objective:

General hypothesis:

Vocational schools with high dropout rates have a less favorable "school climate" (as operationally defined by this study) than schools with lower dropout rates.

To identify some of the educational elements which differentiate between vocational schools with high and low dropout rates:

1. The number (or quantity) of potential dropouts admitted;
2. The flexibility of the curriculum in terms of meeting the needs of the students (especially the student's perceived relevance of the course work to his future plans);
3. The organizational climate of the administration and teaching staff;

4. Holding power techniques of the schools to reduce dropout rates;
5. Student needs and environmental presses as reflected in the school climate.

Procedures:

Some planning for this project had been done prior to the end of the contract period. The proposed procedure would be:

1. Selection of schools:
    a. 5 high dropout rate vocational schools
    b. 5 low dropout rate vocational schools
    c. Secure geographical coverage
2. Populations (or subjects):
    a. A representative sample of approximately 200 students from each school
    b. 10 teachers from each school
    c. 2 administrators from each school
3. In selection of schools, control of variables other than experimental:
    a. Socioeconomic index of the community
    b. The quantity of potential dropouts admitted

4. Collection of data:
    - a. School climate as perceived by students
        - (1) Stern Activities Index
        - (2) Stern High School Characteristics Index
    - b. Organizational climate as perceived by school personnel

        Stern Organizational Climate Index
    - c. Potential dropout index
        - (1) Cottle's School Interest Inventory
        - (2) Questionnaire and school records of students admitted
    - d. Socioeconomic description of the community

        Descriptive data on the community
    - e. School climate as observed by program statement (interview and materials) as obtained by questionnaire of school policies, rules, curriculum, holding power techniques, etc.

5. Analysis of data:

    A comparative analysis will be made of high and low dropout rate vocational schools, based on criteria described above under procedures.

Outcomes:

Anticipated outcomes and contributions are in terms of aspects of the school climate (or system) which indicate a need for modification as follows:

1. Curriculum
2. Administrative policies and procedures
3. Teacher education (pre- and in-service)
4. Personnel service
5. The development of a model and procedures for use in determining climate

23. The Problems and Meaning of Occupational Goals of Disadvantaged Junior High School Students

Purpose:

The major purpose of this study is to determine the problems and meaning of choice or occupational goals of junior high school students, with particular emphasis on the disadvantaged group, and to investigate the underlying principles involved.

Objectives:

Hypotheses to be tested are:

1. Junior high school students have problems in establishing occupational goals, and disadvantaged students have different problems from other students.
2. Junior high school students differ in their perceptions of the meaning of choice, and disadvantaged students differ from other students.

Procedures:

1. Preliminary pilot interviews of disadvantaged junior high school students are being conducted to develop assessment instruments.
2. A research design comparing groups of disadvantaged and advantaged students will be used. Contaminating variables will be controlled psychometrically.
3. Population and Sample: Junior high school students are the focus of this study. The selection of a population and sample will be governed by sociological and economic and other relevant factors. The sample will consist of 1200 to 1500 students taken from five

to ten junior high schools. The study population will be so selected as to maximize the number of students possessing the factors under study.

4. Data Collection and Instruments: A series of paper and pencil instruments will be used to collect the data. The instruments being considered are the Minnesota Vocational Interest Inventory by Clark, a newly published inventory to be used with the disadvantaged, and an adaptation of the Semantic Differential, tests of achievement and reading. Data from school records will also be used.

Outcomes:

The outcomes anticipated include the identification of the problems junior high school students have in making occupational decisions and an understanding of the meaning of choice for the disadvantaged and advantaged groups. Implications for future research are an important outcome of this project. Implications of such research can be developed for junior high school and senior high school curricula and for guidance functions of teachers and counselors at all levels.

24. An Exploratory Survey of the Training and Functions of Guidance Counselors

Purpose:

The purpose of this survey is to gain operational data on the status of guidance in vocational education programs as a means of furthering research and development activities.

Objectives:

1. To obtain information concerning the adequacy of the training received by guidance counselors in vocational education;
2. To determine the functions of guidance as perceived by counselors, teachers, administrators, parents, and students;
3. To investigate cooperative relationships between teachers and counselors;
4. To determine guidance problem areas and provide guidelines for their alleviation.

Procedures:

Questionnaires were sent in October to a representative national sample of public high schools, as defined below. Within each school, one counselor, five teachers, one administrator, five parents, and ten students are being surveyed. The questionnaire covers the school's characteristics; guidance staff, functions, and training; needs of students; internal working relationships; and the respondent's perception of guidance. A total of 745 schools, representing each of the fifty states, is being surveyed.

Outcomes:

Anticipated outcomes of the study include:

1. Guidelines for the training of guidance counselors;
2. Recommendations for teacher-counselor cooperation;
3. Needed guidance services not now being provided;
4. Projections of guidance manpower needs;
5. Correction of discrepancies in group perceptions of guidance functions;
6. Guidelines for administering guidance programs.

25. National Survey of Vocational Education Programs for Students Who Cannot Succeed in the Regular Programs

Purpose:

The purpose of this survey was to provide vocational educators with a descriptive report which could be used for planning and conducting vocational programs for students with special needs. The background information developed will also be utilized in planning future research and development efforts in this area.

Objectives:

1. To determine the numbers and locations of vocational education programs in all states and territories which are designed for pupils with special needs and which are operated by the public schools;
2. To determine the numbers and kinds of such vocational programs which have been established since the passage of P. L. 88-210 and the degree to which vocational education has responded to the expectancies of the act as related to programs for students with special needs.
3. To secure information about individual programs which would facilitate the development of further study and research concerned with vocational education for students with special needs.

Procedures:

State Directors of Vocational Education identified vocational education programs for students with special needs in accordance with a general set of criteria provided by The Center. The data gathered from the 229 administrators, coordinators, and/or teachers in these programs have been summarized and needed research and development activities outlined. Programs in fifty-one states and territories were included in the survey.

Outcomes:

The results of this survey should prove useful in pointing out the degree to which the profession is actually responding to the act by identifying the features of programs for students with special needs that have been uniquely successful, by providing information as to the role of the state staff members in implementing these programs, and by stimulating future research and development efforts.

26. The Demand for and Selected Sources of Vocational and Technical Education Teachers

Purpose:

The major purpose of the study is to determine the critical teacher need areas in vocational and technical education, identify major sources for new teachers, and propose alternative solutions to the problems of teacher supply and demand.

Objectives:

1. To determine the need for teachers in vocational and technical education;
2. To determine potential major sources of teaching talent;
3. To propose alternative solutions to the teacher-need problem.

Procedure:

Phase I. Determine the need for teachers in vocational and technical education areas.

State directors of vocational and technical education have been surveyed concerning present and projected needs for teachers in agricultural education, business and office education, distributive education, health occupations, home economics, technical education, and trade and industrial education. (Lowell Burkett, Executive Secretary of the American Vocational Association, has cooperated in this phase of the project and wrote the cover letter which accompanied the questionnaire.)

Phase II. Determine potential sources of teaching talent.

1. The following bases were surveyed during the third week of June: U. S. Army Transfer Station, Fort Hamilton, New York; U. S. Naval Station, Treasure Island, California; and McGuire Air Force Base, New Jersey. All men processed for discharge during this time period were asked to complete the questionnaire to give the researcher an estimate of the training and background of all military personnel being discharged. The percentage and number of individuals who are interested in and have training which would complement their pursuit of a second career in the vocational teaching field can be determined from this survey.
2. At the end of the contract period a survey was being conducted of a stratified sample of businesses to determine company policies on early retirement and on released time or "moon-lighting" of skilled personnel who might be a potential source of full-time or part-time vocational teachers. Arrangements have been made with the U. S. Chamber of Commerce for selecting these businesses.
3. A representative of the AFL-CIO was interviewed concerning worker attitudes and skill levels for possible teachers.

Outcomes:

The results of this study should be helpful to the U. S. Office of Education, state directors and supervisors, and local administrators. The report will contain suggestions as to the sources of potential teachers, how to contact them, and other detailed information which will be of aid and assistance to all concerned with the procurement of personnel for the vocational schools.

This project will provide important information which may be used in developing "mainstream" sources of needed teachers of vocational and technical education.

This project has had the cooperation of the American Vocational Association. They have assisted in financing a portion of the earlier work.

Systems Development Corporation of Santa Monica, California, had been given a grant through the U. S. Office of Education to initiate a study of retiring military personnel. Dr. Malcolm Richland of SDC and the investigator of this project have established communications to coordinate the work and avoid duplication. The two projects should provide an improved perspective in this area.

27. Fostering Cooperative Education -- A National Leadership Development Seminar

Purpose:

The purpose of this seminar was to provide an opportunity for personnel in all vocational and technical services to examine common elements of existing cooperative education programs and to develop needed leadership abilities for expanding the numbers and improving the quality of such programs.

Objectives:

1. To prepare guidelines for encouraging, developing, improving, and expanding cooperative education programs for high school and post-high school youth;
2. To develop guidelines for seminars and workshops at the state level;
3. To deal with problems of cooperative education facing state vocational education staff, school administrators, the local community, business and industry, management, and unions;
4. To give attention to the building of program development, coordinating, and learning models as they apply to cooperative education.

Procedures:

1. Guidelines for state leaders on the development of cooperative education programs were prepared with the assistance of a consultant: Mr. C. B. Hurst, Director

of Vocational Education and Principal of Patterson Cooperative High School, Dayton, Ohio. Mr. Hurst made on-site visits to fifteen selected schools in eight states to gather information for a comparative analysis of cooperative education programs in the various services. The analysis, plus a collection of handbooks and other materials, were used to develop guidelines for an interservice approach to cooperative education.

2. The seminar was devoted to further developing guidelines and materials for seminars and workshops to be conducted at the state level by seminar participants.
3. Particular attention was given in the seminar to aspects of cooperative education that concern state staff, school administrators, and the local community, including management and labor.
4. Through site visits to outstanding programs, models for developing and strengthening cooperative education programs will be conceptualized.
5. As a follow-up to the seminar, an evaluation of state leadership in providing statewide conferences on cooperative education will be made within the next two to three years and the number of states developing guidelines for cooperative education as a result of the seminar will be determined.

Outcomes:

1. One hundred ten state leaders from 41 states, two territories, and the District of Columbia were involved in the seminar.
2. A set of guidelines for encouraging, developing, improving, and expanding cooperative education programs are being developed.
3. A seminar report, which will include twelve special papers on critical problems and issues confronting cooperative education, will be published.
4. The published report will include the comparative analysis of cooperative education, based on site visits to fifteen schools in eight states (Arizona, Florida, Illinois, Michigan, Minnesota, Missouri, North Carolina, and Ohio).

Consultants:

The following speakers and consultants participated in the seminar.

Mr. Joseph Ackerman, Vice President, National School Boards Association, and Managing Director, Farm Foundation, Chicago, Illinois

Mr. E. W. Belcher, Assistant Superintendent in Charge of Instruction, Louisville City Schools, Kentucky

Dr. Ralph O. Gallington, Professor of Industrial Education, and Professor of Guidance and Psychology, Southern Illinois University

Dr. William B. Logan, Professor of Distributive Education, The Ohio State University

Miss Mary V. Marks, Program Specialist, Distribution and Marketing, Division of Vocational and Technical Education, U. S. Office of Education

Dr. Dennis H. Price, Professor of Vocational Education, University of Cincinnati

Mrs. Dorothy M. Schnell, Bureau of Homemaking Education, State Department of Education, California

Dr. Virginia Keehan, Chief, Program Development Branch, Women's Centers, Office of Economic Opportunity, Washington, D. C.

Mr. Sam W. King, Field Representative, Manpower Development and Training, U. S. Office of Education, Denver, Colorado

Mr. E. F. Laux, Vice President for Marketing, Ford Motor Company, Dearborn, Michigan

Mr. K. Otto Logan, State Director of Distributive Education, Washington

Dr. George L. Luster, Associate Professor of Agricultural Education, University of Kentucky

Dr. Ralph E. Mason, Professor and Chairman of Business and Distributive Education, Indiana State University

Mrs. Christine R. Shack, State Supervisor of Business Education, New Jersey

Dr. Farmer Smith, Assistant Professor of Industrial Education, North Carolina State University

Dr. Jeffrey R. Stewart, Jr., Associate Professor of Business Education, Virginia Polytechnic Institute

Dr. Robert M. Worthington, State Director of Vocational Education, New Jersey

Mr. James H. Wykle, Specialist, Business and Office Education, Regional Office IV, Department of Health, Education, and Welfare, Atlanta, Georgia

Mr. Hugh M. Stevenson, Manager, Manpower and Organization Development, National Cash Register Company, Dayton, Ohio

Dr. Ralph M. Stogdill, Professor of Business Organization, The Ohio State University

Mr. Sol Swerdloff, Chief, Division of Manpower and Occupational Outlook, Bureau of Labor Statistics, U. S. Department of Labor

Mr. Jack Sessions, Education Representative, American Federation of Labor and Congress of Industrial Organization, Washington, D. C.

28. A Research Exchange Conference on Systems Under Development for Vocational Guidance

Purpose:

The purpose of this conference was to provide an opportunity for major research investigators to exchange research progress information and to develop solutions for mutual research design problems. Each of the participants is currently engaged in a major innovative system project involving both vocational guidance and vocational education (e.g., computer assisted counseling and multimedia approaches to occupational information). The Center is serving as a catalyst in bringing together personnel from a number of institutions affiliated with related research endeavors.

Objectives:

1. To review experiences, problems, and insights developed by the individual participants through research and operational use of these new technologies;
2. To review the relation of these technologies to vocational counseling and guidance as a whole;
3. To arrange for continued communication among participants as they bring to bear systems analysis and technology in vocational guidance research and practice;
4. To ascertain the dissemination implications for The Center.

Procedure:

Prior to the two-day conference held at The Center, each participant submitted a preconference report of the progress of his research. During the conference each person served as both a consultant and a participant on mutual research design problems. Recommendations were made concerning future research goals and the application of the findings.

Outcomes:

1. The exchange of research progress and problems to:
    a. Improve methodologies.
    b. Reduce unnecessary duplication of effort among projects and provide a more orderly and systematic attack on common problems.
    c. Identify voids in present research efforts.
    d. Identify usable innovations applicable for other investigators for pilot and demonstration programs.
2. A report will be disseminated to other investigators and practitioners in the fields of guidance and counseling, vocational education, psychology, labor economics, education media, general education, and sociology.
3. Plans were made for the group to continue such meetings at regular intervals.

Participants and Consultants:

Dr. John F. Cogswell, Human Factor Scientist-Research Leader, Education and Training Staff of the Research and Technology Division, Systems Development Corporation, Santa Monica, California

Dr. William W. Cooley, Project TALENT Director, Pittsburgh, Pennsylvania

Dr. Allan B. Ellis, Assistant Professor of Education and Research Associate in Education, Director of Research - NEEDS, Harvard Graduate School of Education

Dr. Robert A. Ellis, Professor of Sociology and Director of the Center for Occupational Planning, University of Oregon

Mr. Don Estavan, Systems Development Corporation, Santa Monica, California

Dr. Frank Field, Coordinator of Counselor Education, University of California, Santa Monica

Dr. Robert P. O'Hara, Executive Director, Information System for Vocational Decisions, Harvard Graduate School of Education

Dr. Thomas Hilton, Senior Research Psychologist, Educational Testing Service, Princeton, New Jersey

Dr. Joseph Impellitteri, Department of Vocational Education, Pennsylvania State University

Dr. John D. Krumboltz, Associate Professor of Education and Psychology, Stanford University

Dr. Thomas Magoon, Director of Counseling Center, University of Maryland

Dr. Frank Minor, Advisory Psychologist, IBM Corporation, White Plains, New York

Dr. Roger A. Myers, Associate Professor of Psychology, Teachers College, Columbia University

Dr. Keith Whitmore, Research Laboratory, Eastman Kodak Company, Rochester, New York

Staffing:

Conference Coordinators

Dr. Ann M. Martin, The University of Pittsburgh

Dr. Robert E. Campbell, Occupational Psychology Specialist, The Center for Vocational and Technical Education

Program Chairman

Dr. David V. Tiedeman, Professor of Education, Harvard University

EVALUATION OF THE CENTER

In assessing The Center efforts, a wide range of approaches needs to be made. First, the continuing national advisory committee of The Center provides a means of assisting the University administration and The Center staff in evaluating the results of specific projects and activities, the relative allocation of resources, and the total impact of The Center. Further, the structure of The Center is such that continued support and interest of its clientele (state leaders in vocational and technical education) are essential. This would seem to be a viable criterion measure. The University community itself provides another dimension in assessing the impact and effectiveness of The Center program and procedures.

Perhaps the most critical point is that, recognizing the organizational structure, procedures, and obligations of The Center, it should not be evaluated solely on what it accomplishes directly with its own staff and resources but should, in addition, be evaluated in terms of its contributions to the efforts elsewhere that it has catalyzed and energized. These more intangible contributions are extremely difficult to identify; but, nevertheless, exist. For example, a State Supervisor of Health Occupations was able to use information and concepts received as a result of participation in the National Seminar on Health Occupations Education Centers to establish a pilot Center in her state. Similar success stories could be cited for other projects and activities.

Specific projects and activities conducted by The Center do lend themselves to precise evaluation procedures and are being appropriately applied. For example, seminars or dissemination projects are evaluated in terms of specific objectives, changes in participant attitudes, and actions growing out of ideas generated by the project.

Another less precise assessment of The Center's worth is the increased requests for counsel and assistance from a wide range of sources, administrative levels, and disciplines.

Close and continuous contacts, including site visits, with The Center project officer and other personnel in various bureaus of the U. S. Office of Education provide further means of assessment and appraisal.

Finally, it should be emphasized that the organizational structure of The Center contains self-evaluation mechanisms designed to assure fresh perspectives and innovative approaches. The continuing Center advisory committee; ad hoc advisory groups; visiting staff and consultants; staff contacts with key reference groups, and other institutions, agencies, and organizations in the consortia provide the challenge needed to safeguard against provincialism, complacency, or traditionalism in The Center program.

An evaluation procedure contemplated for the future includes the assignment of a staff member to continuing responsibility for providing leadership and coordination to an internal quality control system.

Program Evaluation and Review Technique or variations thereof applied to the general administrative concerns of The Center and to major projects and activities will provide another means of evaluation and monitoring.

FACILITIES AND LOCATION

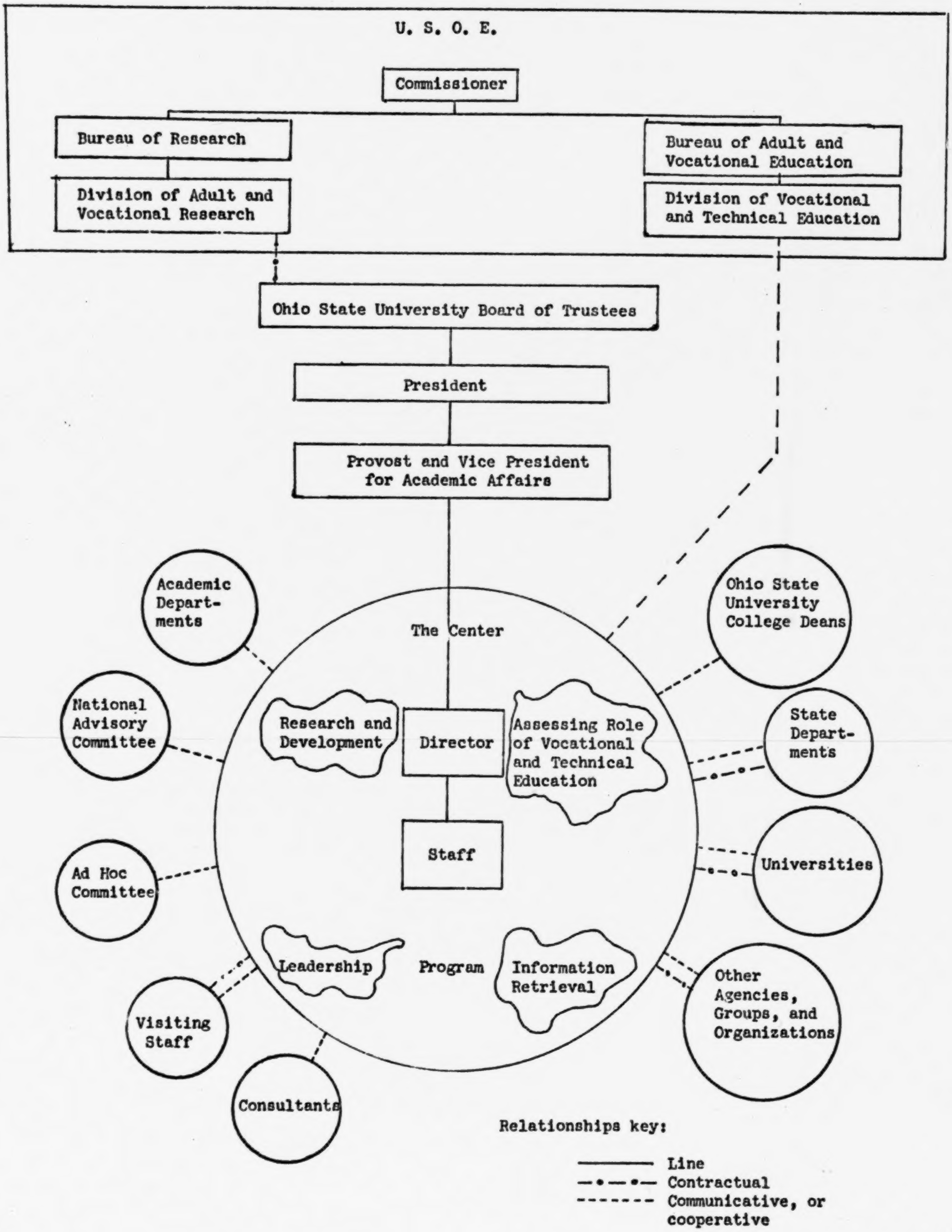
The University has provided housing for The Center in a one-story brick and masonry building on The Ohio State University campus at 980 Kinnear Road. This building is served by campus bus and mail service. The Computer Laboratory, The Ohio State Research Center, and The Behavioral Science Laboratory are nearby. Other related operations, such as Chemical Abstracts and Battelle Memorial Institute, are in the immediate University community.

The accommodations, which include individual offices, a conference room, a research library, mimeograph and mail service room, and larger multiple work station rooms, are adequately equipped, air-conditioned, and arranged for functional utilization. (Appendix H shows the floor plan for the physical plant.) Other facilities needed to accomplish The Center objectives are available on the University campus.

APPENDICES

APPENDIX A

Organizational Chart and Relationships


U. S. O. E.
Commissioner
Bureau of Research
Division of Adult and Vocational Research
Bureau of Adult and Vocational Education
Division of Vocational and Technical Education
Ohio State University Board of Trustees
President
Provost and Vice President for Academic Affairs
The Center
Research and Development
Director
Assessing Role of Vocational and Technical Education
Staff
Leadership
Program
Information Retrieval
Academic Depart-ments
National Advisory Committee
Ad Hoc Committee
Visiting Staff
Consultants
Ohio State University College Deans
State Depart-ments
Universities
Other Agencies, Groups, and Organizations
Relationships key:
Line
Contractual
Communicative, or cooperative

APPENDIX B

AFFILIATIONS OF CENTER SENIOR STAFF MEMBERS

Professional Organizations

Administrative Management Society
Adult Education Association
American Association for the Advancement of Science
American Association of Teacher Educators in Agriculture
American Association of University Professors
American Documentation Institute
American Educational Research Association
American Home Economics Association
American Library Association
American Society for Engineering Education
American Society of Personnel Administrators
American Sociological Association
American Technical Education Association
American Vocational Association
Association for Supervisor and Curriculum Development
National Association of Distributive Teacher Education
National Association of State Supervisors of Distributive Education
National Association of Industrial Teacher Educators
National Business Education Association
National Council Family Relations
National Education Association
National Society for the Study of Education
National Vocational Agriculture Teachers Association
Special Libraries Association
The American Psychological Association

Honorary and Professional Fraternities

Alpha Kappa Delta
Alpha Tau Alpha
Alpha Zeta
Delta Pi Epsilon
Gamma Sigma Delta
Iota Lambda Sigma
Kappa Delta Pi
Omicron Nu
Phi Delta Kappa
Phi Kappa Phi
Phi Lambda Theta
Pi Gamma Mu
Pi Omega Pi

APPENDIX C

INSTITUTIONS REPRESENTED BY AND DIVERSE EMPLOYMENT BACKGROUNDS OF THE SENIOR STAFF

Institutions Represented in Training and/or Employment

Blackburn College, Illinois
Bob Jones University, South Carolina
Brainerd Junior College, Minnesota
Columbia University Teachers College
Cornell University, New York
Dennison University, Ohio
Ferris State College, Michigan
Florida State University
Georgia State Teachers College
Harvard University, Massachusetts
Indiana University
Iowa State University
Louisiana State University
Madison College, Virginia
Ohio State University
Oklahoma State University
Oregon State University
Pennsylvania State University
South Dakota State University
University of Arizona
University of Cincinnati, Ohio
University of Michigan
University of Minnesota
University of Missouri
University of North Carolina
University of Oklahoma
University of Omaha, Nebraska
University of Tennessee
University of Washington
University of Wisconsin
Virginia Polytechnic Institute
Western Michigan University
Western Reserve University, Ohio

Diversity of Employment Experience

Teacher Educators in Trades and Industrial Education, Agricultural Education, Business and Office Occupations Education, Technical Education, and Distributive Education
State Supervisors in Agricultural Education, Home Economics Education, and Distributive Education
University teaching experience
High School teaching experience in Vocational Agriculture, Biology, Social Studies, Business subjects, Home Economics, Trades and Industry
Visiting professors at the University of Minnesota, Boston University, Montana State University, Kansas State College, University of Georgia, University of Michigan, and Wayne State University
State Executive Secretary of youth organization
Consultant, Bureau of Research, U. S. Office of Education
Head, Division or Department (Business, Trade-Technical Education, Libraries)
Senior Research Scientist (Private research organization)
Programmer, Multimedia Instructional Laboratory
Counseling psychology intern and counseling psychologist
Private practice and consulting psychologist
Visiting and guest lecturer at several colleges and universities
School administrator

States in Which Education Leadership Positions Have Been Held

Arizona
Florida
Georgia
Iowa
Indiana
Louisiana
Maryland
Massachusetts
Michigan
Minnesota
Missouri
Nebraska
New York
North Carolina
Ohio
Oklahoma
Oregon
Pennsylvania
South Carolina
South Dakota
Tennessee
Virginia
Washington
Wisconsin

APPENDIX D

SELECTED PROFESSIONAL EXPERIENCES AND GEOGRAPHICAL DISTRIBUTION OF CENTER RESEARCH ASSOCIATES

FRANKLIN H. DYE
B.S., M.Ed., Boston University, Massachusetts
Pursuing doctoral program at The Ohio State University
Experience: Instructor in Business, Eastern Illinois University;
Chairman, Secretarial Studies Department, Massachusetts Bay Community College;
Educational Lecturer and Speed Typing Expert, Royal McBee Corporation;
Instructor in Business, Colby Junior College, New Hampshire

DONALD F. EGGEMAN
B.S. Ohio State University
Pursuing doctoral program at The Ohio State University
Experience: Director of Personnel and Rehabilitation, Goodwill Industries;
Psychology Trainee, Veterans Administration;
Teaching Assistant, Ohio State University

MELVIN L. GARY
B.A. Haverford College, Pennsylvania
M.A. The Ohio State University
Pursuing doctoral program at The Ohio State University
Experience: Caseworker, Pennsylvania Department of Public Welfare;
Teaching Assistant, The Ohio State University;
Psychology Trainee, Veterans Administration Hospital, Ohio

KENNETH E. HOFFMAN
B.A. St. Benedict's College, Kansas
M.Sc. Kansas State Teacher's College
Pursuing doctoral program at The Ohio State University
Experience: Teacher-Educator in Distributive and Office Education, Kansas State Teacher's College;
Coordinator-Instructor of Office and Distributive Education and Vocational Guidance Counselor, Burlingame High School, Kansas;
Instructor, Arkansas City High School, Kansas

KATHLEEN A. HOWELL
B.S., M.A., The Ohio State University
Pursuing the doctoral program at The Ohio State University
Experience: Home Economics Instructor, Tiffin City Schools, Ohio;
Supervisor of Student Teachers, Heidelberg College, Ohio

CECIL H. JOHNSON
B.S., M.Ag.Ed., Clemson University, South Carolina
Pursuing doctoral program at The Ohio State University
Experience: Assistant District Supervisor and Special Teacher, South Carolina State Department of Education;
Agriculture Teacher, Darlington County School System and Williamsburg County Educational System, South Carolina;
Graduate Assistant, Clemson University, South Carolina

ROBERT V. KERWOOD
B.S., M.S., West Virginia University
Pursuing doctoral program at The Ohio State University
Experience: Assistant Professor, Agricultural Education, West Virginia University;
Vocational Agriculture and Biology Teacher, Gilmore High School and Ravenswood High School, West Virginia

DAVID L. LARIMORE
B.S., M.S., North Carolina State University
Pursuing doctoral program at The Ohio State University
Experience: Director of Evening Program, Rowan Technical Institute, North Carolina;
Research Assistant, North Carolina State University;
Instructor of related trade subjects, W. W. Holding Technical Institute, North Carolina

STEPHEN R. LUCAS
B.S., M.A., The Ohio State University
Pursuing doctoral program at The Ohio State University
Experience: Teacher-Coordinator of Distributive Education, Grove City Schools, Ohio;
Distributive Education and business subjects teacher, Salem High School, Ohio

JOEL H. MAGISOS
B.S., M.S., Washington State University
Pursuing doctoral program at The Ohio State University
Experience: Teacher Educator and State Supervisor of Vocational Agriculture, Washington State University;
Vocational Agriculture Instructor, Auburn School District and Deer Park School District, Washington;
Institutional On-the-Farm Training Instructor in Botany and Vocational Agriculture, Cheney School District, Washington

EMMETT E. MASON
B.S. Northwest Missouri State College
M.S. Colorado State College
Pursuing doctoral program at The Ohio State University
Experience: Instructor of Machine Shop, West Virginia State College;
Secondary Teacher

PATRICIA M. SMITH
B.S. University of Massachusetts
M.S. University of Bridgeport, Connecticut
Pursuing doctoral program at The Ohio State University
Experience: Assistant Professor, Home Economics, and Director, Home Management Residence, University of Vermont;
Head, Home Economics Department, Haverhill High School and Old Rochester Regional High School, Massachusetts;
Acting Chairman, Home Economics Department, Trumbull High School, Connecticut

PAUL H. STEAGALL
B.S., M.Ed., Virginia Polytechnic Institute
Pursuing doctoral program at The Ohio State University
Experience: Teaching Assistant, Virginia Polytechnic Institute;
High School teacher, Business subjects;
Coordinator, data processing

MARJORIE A. STEWART
B.S. University of California, Los Angeles
M.S. University of Kentucky
Pursuing doctoral program at The Ohio State University
Experience: Supervisor of Student Teachers, Western State College, Kentucky;
Home Economics Instructor, Secondary Schools

APPENDIX E

A PARTIAL LIST OF AGENCIES AND ORGANIZATIONS WHICH HAVE PARTICIPATED IN CENTER PLANNING ACTIVITIES

A.F.L. - C.I.O.
American Book Publishers Association
American Economic Association
American Home Economics Association
American Institutes for Research
American Nursery Association
American Personnel and Guidance Association
American Psychological Association
American Rehabilitation Counseling Association
American School Counselors Association
American Sociological Association
American Technical Education Association
American Telephone and Telegraph
American Textbook Publishers Association
American Vocational Association
Battelle Memorial Institute
Chemical Abstracts
Columbus Landscaping Association
Deere, John and Company
DuPont DeNemours, E. I., Research Laboratory
Eastman Kodak Company
Educational Film Library Association
Educational Media Council
Educational Testing Service
Electronics Industries Association
Farm Foundation
Ford Motor Company
General Motors Corporation
Industrial Relations Research Association
International Business Machines
Kennecott Copper Corporation
Midwest Program of Airborne Television Instruction, Inc.
National Academy of Sciences
National Audio-Visual Association
National Grain and Feed Dealers Association
National University Extension Association
National Vocational Guidance Association
Penney, J. C., Company
Sears-Roebuck Foundation
Society of Motion Picture and Television Engineers
State Departments of Education of forty-nine states and three territories
Systems Development Corporation, Santa Monica, California
U. S. Department of Agriculture
U. S. Department of Labor
U. S. Office of Education
United States Steel
University Film Producers Association
Women's Bureau, U. S. Department of Labor

APPENDIX F

INSTITUTIONS OF HIGHER EDUCATION THAT HAVE HAD REPRESENTATIVES PARTICIPATE IN CENTER ACTIVITIES

Alabama
- Alabama A. & M. College
- Auburn University
- Tuskegee Institute
- University of Alabama

Alaska
- University of Alaska

Arizona
- Arizona Western College
- Mesa Community College
- Northern Arizona University
- University of Arizona

Arkansas
- Arkansas A. M. & Normal
- University of Arkansas

California
- Chico State College
- Coalinga College
- Modesto State College
- San Joaquin Delta College
- Stanford University
- University of California
- University of Southern California

Colorado
- Colorado State University
- Mesa Junior College
- Trinidad State Junior College
- University of Colorado

Connecticut
- Thames Valley State Technical Institute
- University of Connecticut
- Waterbury State Technical Institute

Florida
- Brevard Junior College
- Central Florida Junior College
- Daytona Beach Junior College
- Florida A. & M. University
- Florida Keys Junior College
- Florida State University
- Hillsborough College
- Miami-Dade Junior College
- Polk Junior College
- St. John's River Junior College
- University of Florida
- University of Southern Florida

Georgia
- The Women's College of Georgia
- University of Georgia

Hawaii
- University of Hawaii

Idaho
- University of Idaho

Illinois
- Canton Community College
- Eastern Illinois State University
- Joliet Junior College
- Northern Illinois University
- Northwestern University
- Southeast Junior College, Chicago
- Southern Illinois University
- University of Chicago
- University of Illinois

Indiana
- Ball State University
- Indiana State College
- Indiana State University
- Indiana University
- Purdue University

Iowa
- Iowa State University
- State College of Iowa
- University of Iowa

Kansas
- Hutchinson Community Junior College
- Kansas State Teachers College
- Kansas State University
- Schelling Institute
- University of Kansas

Kentucky
- Eastern Kentucky State College
- Kentucky State College
- Murray State College
- University of Kentucky

Louisiana
- F. T. Nichols State College
- Louisiana State University
- Northeast Louisiana State College
- Northwestern State College
- Southern University, Baton Rouge

Maryland
- Charles County Community College
- University of Maryland

Massachusetts
- Boston College
- Harvard University
- State College of Framingham

Michigan
- Ferris State College
- Lansing Community College
- Macomb County Community College
- Michigan State University
- Northern Michigan University
- Oakland Community College
- Port Huron Junior College
- University of Michigan
- Wayne State University
- Western Michigan University

Minnesota
- Mankato State College
- Rochester Junior College
- University of Minnesota

Mississippi
- Alcorn A. & M. College
- Mississippi State University

Missouri
- Linn Technical School
- Mineral Area College
- University of Missouri

Montana
- Montana State University

Nebraska
- University of Nebraska

Nevada
- University of Nevada

New Hampshire
- University of New Hampshire

New Jersey
- Newark State College
- Rutgers, The State University
- Trenton State College

New Mexico
- Eastern New Mexico University
- Highlands University

New York

Agriculture & Technical Institute, Farmingdale
College of Saint Rose, Albany
Columbia University
Cornell University
Erie County Technical Institute
Hunter College of the City University of New York
New York City Community College
State University College, Albany
State University College, Buffalo
State University College, Oswego
Syracuse University

North Carolina

Agricultural & Technical College, Greensboro
Central Piedmont Community College
Durham Technical Institute
East Carolina College
Forsyth Technical Institute
W. W. Holding Technical Institute
North Carolina State University
Randolph Technical Institute
Rockingham Community College

North Dakota

North Dakota State University
University of North Dakota

Ohio

Bowling Green University
Kent State University
Miami University
Ohio Technical Institute, Springfield
Ohio University
The Ohio State University
University of Cincinnati

Oklahoma

Eastern A. & M. College
Oklahoma College for Liberal Arts
Oklahoma State University

Oregon

Clatsop Community College
Oregon State College
Portland Community College
University of Oregon

Pennsylvania

Indiana University of Pennsylvania
Macomb County Community College, Warren
Mansfield State College
Pennsylvania State University
Shipensburg State College
Temple University
University of Pittsburgh

Rhode Island

University of Rhode Island

South Carolina

Clemson University
South Carolina State College
Winthrop College

South Dakota

South Dakota State University
Southern State Teachers' College

Tennessee

George Peabody College, Nashville
University of Tennessee
University of Tennessee, Martin Branch

Texas

Austin State College
Bishop College
College of Arts and Industries
Grayson County Junior College
Kilgore College
Laredo Junior College
Navarro College
North Texas State University, Denton
Prairie View A. & M. College
Sam Houston State College
Texas Christian University
Texas Southern University
Texas Technical College
Texas Women's University
University of Texas

Utah
- Brigham Young University
- Utah State University
- Utah Trade-Technical Institute

Vermont
- University of Vermont
- Vermont Technical College

Virginia
- Madison College
- Norfolk State College
- Richmond Professional Institute
- Virginia Polytechnic Institute
- Virginia State College

Washington
- Big Bend Community College
- Clark College
- Green River Community College
- Lower Columbia College
- Olympic Community College
- Peninsula College
- Skagit Valley College
- University of Washington
- Washington State University

West Virginia
- Bluefield State College
- West Virginia Institute of Technology, Montgomery
- West Virginia Wesleyan College

Wisconsin
- Coleman Technical Institute
- Oshkosh Technical Institute
- Racine Technical Institute
- Stout State University
- University of Wisconsin

Wyoming
- University of Wyoming

Canada
- University of Alberta, Edmonton

APPENDIX G

PUBLICATIONS

A Report of a National Seminar on Agricultural Education, "Program Development and Research," 1965

"Research Planning in Business and Office Education," 1966

A Report of "A National Leadership Seminar on Home Economics Education," 1966

"Evaluation and Program Planning in Agricultural Education," 1966

"Guidelines for State Supervisors in Office Occupations Education," Report of a National Clinic, 1965

"Guidance in Vocational Education: Guidelines for Research and Practice," 1966

A Report of "A National Invitational Research Planning Conference on Trade and Industrial Teacher Education," 1966

A Report of "A National Vocational Education Seminar on the Administration of Research," 1965

A Report of a Research Exchange Conference, "Systems Under Development for Vocational Guidance," 1966

A Seminar Report on "Research Development and Coordination," 1966

"The Emerging Role of State Education Departments with Implications for Vocational Education," 1967, Vols. 1 and 2 (Preliminary draft of background information developed for the conference on the "Emerging Role of State Departments of Education with Implications for Vocational Education")

Publications Concerning Off-farm Agricultural Occupations

"Policy and Administrative Decisions in Introducing Vocational and Technical Education in Agriculture for Off-farm Occupations"

"Vocational and Technical Education in Agriculture for Off-farm Occupations"

"Summary of Research Findings in Off-farm Agricultural Occupations"

"Planning and Conducting Cooperative Occupational Experience in Off-farm Agriculture"

"Occupational Guidance for Off-farm Agriculture"

Instructional Material in:

- Horticulture - Service Occupations
  (Course outline and twelve modules)
- Agricultural Supply - Sales and Service Occupations
  (Course outline and twelve modules)
- Agricultural Machinery - Service Occupations
  (Course outline and sixteen modules)
- Agricultural Chemicals Technology
  (Course outline and eight modules)

"Organizing to Provide Agricultural Education for Off-farm Occupations"

Publications Pending

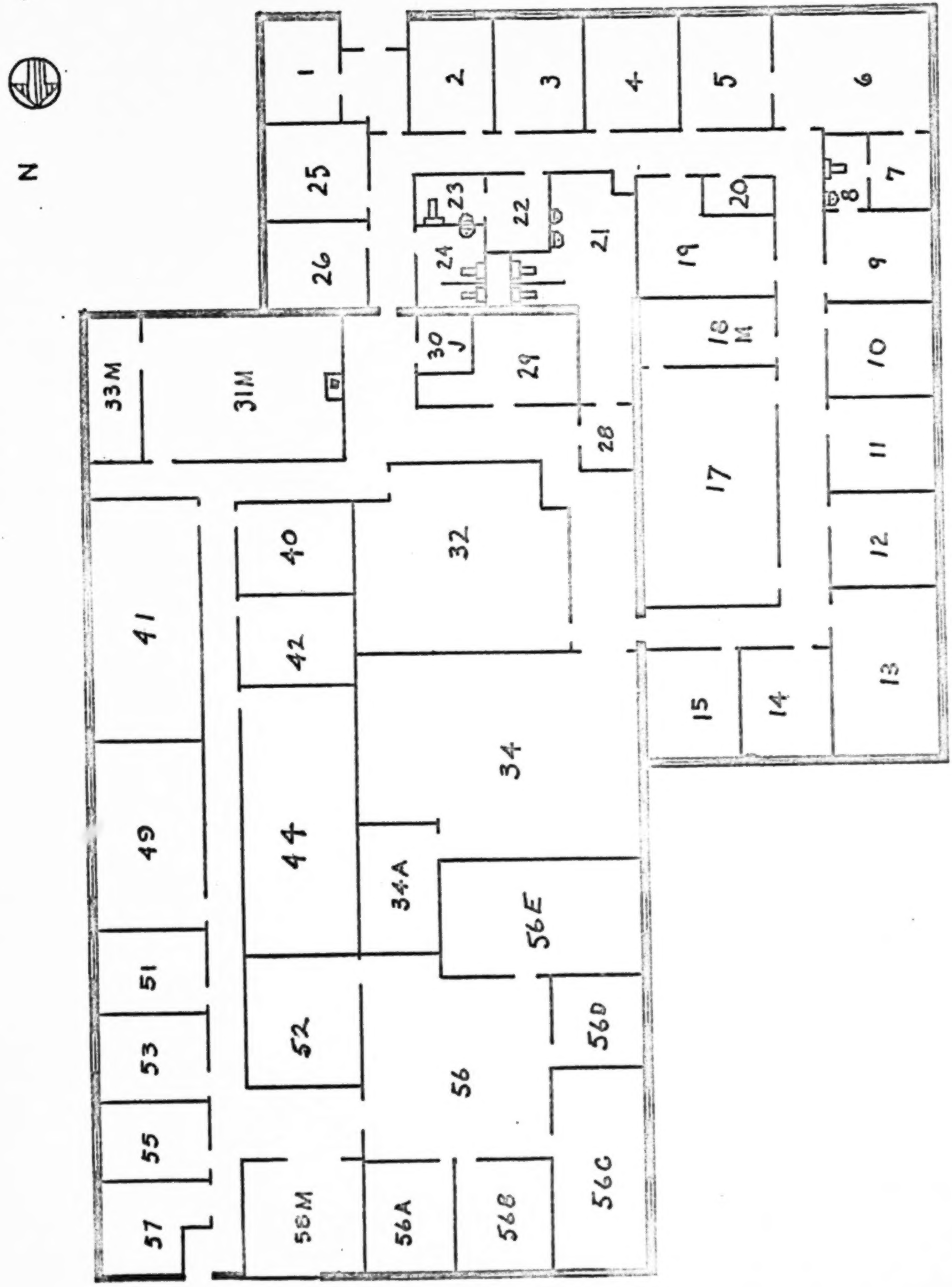
"A Report of a National Seminar on Cooperative Education"

"A Report of a National Seminar on Health Occupations Education Centers"

"Guidelines for Cooperative Education"

"A Survey of Vocational Education Programs for Students with Special Needs"

Research Reviews in:
- Agricultural Education
- Business and Office Education
- Distributive Education
- Home Economics Education
- Industrial Arts Education
- Technical Education
- Trade and Industrial Education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